Canon

BCTV Zoom Lens
广播电视变焦镜头

DIGISUPER

XJ100x9.3B AF
XJ100x9.3B
XJ95x8.6B
XJ86x13.5B
XJ86x9.3B AF
XJ86x9.3B
XJ80x8.8B
XJ76x9B
XJ75x9.3B
XJ72x9.3B
XJ60x9B
XJ27x6.5B AF
XJ27x6.5B
XJ23x7B

取扱説明書
OPERATION MANUAL
使用说明书

ご使用の前に必ずこの取扱説明書をお読みください。
なお、取扱説明書は必要に応じてご覧になれるよう大切に保管してください。

Read this operation manual before using the product.
Keep the manual in place for future reference.

在使用本产品之前，请务必先仔细阅读本使用说明书。
请务必妥善保管好本书，以便日后能随时查阅。（保留备用）
请在充分理解内容的基础上，正确使用。

J/E/C

ENGLISH
VERSION

The English version is the operation manual
for counties other than Japan.

FCC REGULATIONS

This device complies with Part 15B of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15B of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Canadian Radio Interference Regulations

CAN ICES-3(A)/NMB-3(A)

CE

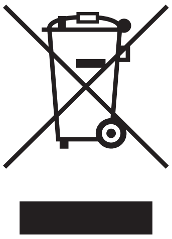
We, Canon Inc., in Japan and CANON EUROPE LTD., in U.K., confirm that the BCTV zoom lens is conformity with the essential requirements of EC Directive(s) by applying the following standards:
EN55103-1 and EN55103-2

Note:
a) Applicable Electromagnetic Environments:
    E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors) and E4 (controlled EMC environment, ex. TV studio).
b) Use of shielded cable is required to comply with limits specified by above standards.

NOTE: Above declaration is applicable to 12V DC input zoom lenses.

Dieses Produkt ist zum Gebrauch im Wohnbereich, Geschäfts- und Gewerbebereich sowie in Kleinbetrieben vorgesehen.

European Union (and EEA) only.



This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service.
Your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources and will avoid incurring administrative sanctions according to art. 50 and following of Italian legislative decree 22/97.
For more information regarding return and recycling of WEEE products, please visit
www.canon-europe.com/environment.
(EEA: Norway, Iceland and Liechtenstein)

PREFACE

Thank you for purchasing the Canon BCTV zoom lens. This operation manual explains the functions and operating instructions for the Canon BCTV zoom lens. It also describes precautions for handling the lens. Read this operation manual carefully before using the product. Also, keep this manual in a safe place where it can easily be referenced whenever necessary.

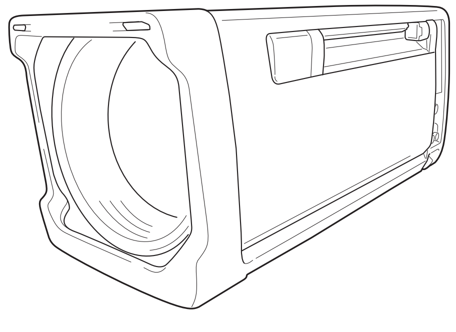
This operation manual is applicable for the following models:

Model name	Operation system	Interface
XJ100x9.3B AF XJ100x9.3B XJ95x8.6B XJ86x13.5B XJ86x9.3B AF XJ86x9.3B XJ80x8.8B XJ76x9B XJ75x9.3B XJ72x9.3B XJ60x9B XJ27x6.5B AF XJ27x6.5B XJ23x7B	IESD	BA BB CA CB CC HA HB HH IA IB IH PH SA SB SC SH
XJ60x9B XJ27x6.5B XJ23x7B	IESDA	

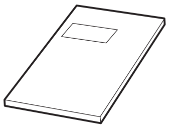
PRODUCT CONFIGURATION

Make sure that the following items are included in a package.
(If you find any item missing, please contact the dealer from whom you purchased this product.)

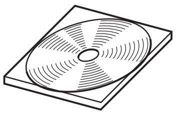
Lens Body



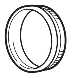
Oparation Manual
(this booklet)



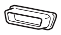
CD-ROM
(technical documents)*1



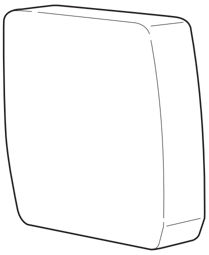
Dust Cap
(attached to the lens)



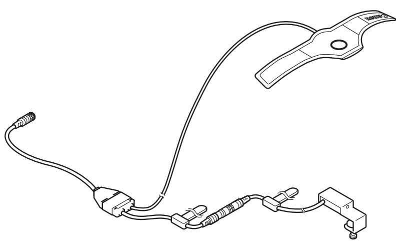
Connector Cap
(attached to the lens) *2



Hood Cap (attached to the lens)



IS Operation Unit *3



*1 Depending on the model, the technical documents may also be in the form of a booklet.
*2 The connector cap is provided to protect the interface connector(s) between the lens and the camera. For some lens models, two (2) pieces are provided.
*3 The IS operation unit comes only with models with the IS function. However, it is available as an option with the XJ95x.

- Accessories other than those mentioned above may be required depending on the specifications of your unit. For more details, contact our sales representative.
- The illustrations shown on this page and subsequence pages are those of the XJ95x8.6B. Shapes of lens may be slightly different between models.
- The illustrations of accessories shown in this booklet are those of standard specifications. Shapes may be slightly different between specifications.

GENERAL SAFETY INFORMATION

Be sure to observe the safety warnings and cautions provided on the product and in this operation manual. Failure to observe these warnings and cautions may result in injury or accident.
Read this operation manual carefully to familiarize yourself with its contents and ensure that you can operate the product properly.
Also, store this manual in a safe place where it can easily be referenced whenever necessary.

This operation manual uses the following symbols and terms to identify hazards in order to prevent accidents.

⚠ **WARNING**	This indicates a potentially hazardous situation which, if not heeded, may result in death or serious injury to you or others. Be sure to heed all warning notices to ensure safe operation at all times.
⚠ **CAUTION**	Indicates potentially hazardous situations which, if not heeded, may result in minor or moderate injury to you or other persons, or property damage.
*** (NOTE)**	Emphasizes essential information which, if not heeded, may make the product unworkable or cause it to function improperly. Helpful information for operation is also provided.

HANDLING THE PRODUCT

⚠ WARNING

1. Never allow water or other liquids to enter or be spilled on the product. Immediately stop using the product if water or other liquids get inside the product. Otherwise, fire or electric shock could result.
2. Do not stare at the sun or any other source of high-intensity light through the lens. Doing so could injure your eyes.

⚠ CAUTION

1. Always grasp the specified portions of the lens when transporting the lens, or when attaching or detaching it to or from the camera head.
   Otherwise, the lens may fall, possibly causing injury.
2. All mountings must be tightened securely. If any of the mountings become loose, the lens may fall, possibly causing injury.
3. Always grasp the connector itself when connecting or disconnecting the demand cable. Pulling on the cable portion may result in damage to the cable, such as breakage of the conductors. Power leaking from a damaged cable may present a fire or electric shock hazard.
4. Check periodically (for instance, every 6 months to 1 year) that all mountings are securely tightened. If any of the mountings become loose, the lens may fall, possibly causing injury.
5. If it becomes necessary to repair this product, or to perform any operations or adjustments not mentioned in this operation manual, contact Canon's representative or the dealer who originally supplied the lens.
6. When this product is used in direct sunlight, the inside of the unit may be heated to high temperatures. When it is expected that the unit is exposed to elevated temperatures, take measures against heat as appropriate on the customer's side.

* (NOTE)

1. Protect the lens from strong impacts of shocks. Striking or dropping the lens could damage it.
2. Since the lens is not completely waterproof, avoid directly exposing the lens to rain or snow. When the lens has to be used in rain or snow, provisions should be made to prevent the lens from getting wet.
3. Under dusty conditions, the lens should be mounted or dismounted with a cover placed over the mount so as to prevent dust from entering the inside.
4. Do not bring the lens from an area with a very cold ambient temperature abruptly into a warm room, as the lens may fog on the inside. If this happens, the lens cannot be used until the condensation clears. Take adequate countermeasures to ensure that condensation does not form.
5. If the lens is to be used in adverse environments, such as in a chemical laden atmosphere, consult with Canon's representative beforehand.

DEALING WITH ABNORMALITIES

⚠ WARNING

1. Should any of the abnormalities described below occur, contact Canon's representative or the dealer who originally supplied the lens.
   - Smoke, unusual smell or unusual noise
   - Entry of foreign objects (including metals or liquids) inside the lens.

MAINTENANCE AND INSPECTION

⚠ WARNING

1. Unplug the demand cable and remove the lens from the camera, before attempting to clean the lens. Never use flammable substances such as benzene or thinner for cleaning, as this may present a serious fire or electric shock hazard.

* (NOTE)

1. Dust or fingerprints on the lens surface
   Gently blow or brush away dust or dirt on the lens surface using a lens blower or a soft lens brush.
   Remove any fingerprints or other stains with a soft clean cotton cloth moistened with lens cleaning fluid or lens cleaning paper (Shilbon paper, etc.).
   Gently swirl the cloth or paper over the lens surface. Start first at the center area of the lens and rub with a circular motion, then gradually shift the circle until whole lens surface has been covered.
   Be careful not to rub dust across the lens, as the lens surface may be scratched.
2. Periodic inspection
   A periodic inspection (about once a year) is recommended.
   The inspection and maintenance interval depends on the operating conditions, the frequency of use, and the environment. If required, overhaul the lens.

STORAGE

⚠ CAUTION

1. Always attach the hood cap and the dust cap before storing the lens.
   Storing the lens without these caps attached may present a fire hazard due to light convergence effect.

* (NOTE)

1. If moisture enters the lens due to mist or light rain, etc., immediately wipe away any water with a dry cloth and then seal the lens in a vinyl bag together with a desiccant (as fresh as possible) to completely remove the moisture from inside the lens.

TO THE CUSTOMER

1. Canon shall bear no responsibility for damage resulting from improper operation of this product by the customer.
2. Canon shall make no guarantees about the product quality, functions, or operation manual and its marketability and suitability for the customer’s purpose. Moreover, Canon shall bear no responsibility for any damage, direct or incidental, that results from usage for the customer’s purpose.
3. Canon shall make no guarantees about the results obtained using this product.
4. The product specifications, configuration, and appearance are subject to change without prior notice.
5. For further information on repairs, maintenance, or adjustments not mentioned in this operation manual, contact your Canon dealer or your Canon sales representative.
6. Note that Canon may be unable to undertake servicing or repair of a product if it is modified without consulting Canon or your Canon sales representative.

CANON INC.
30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo
146-8501, Japan

Canon Europe Ltd
3 The Square, Stockley Park, Uxbridge, Middlesex,
UB11 1ET UK

All rights reserved. No part of this operation manual may be reproduced or copied in any from or by any means without the written permission of Canon Inc.

1 HOW TO MOUNT E2

1-1 Mounting the Lens onto the Camera E2

1-2 Mounting the Accessories for Full Servo Operation E3

1-3 Mounting the Accessories for Semi-servo Operation E5

1-4 Mounting the Accessories for Manual Control System E6

2 PREPARATION E7

2-1 Initialize Operation (Only Models with a Display) E7

2-2 Back Focus Adjustment E7

2-3 Removing and Installing the Lens Shroud E8

2-4 Iris Gain Adjustment E8

2-5 Iris Mode Setting (Option) E10

2-6 Setting on the Information Display E11

2-7 Incorporable Focus Servo Demand (Option) E12

3 OPERATION E13

3-1 Zoom and Focus Operation E13

3-2 Iris Operation E14

3-3 Extender Operation E15

3-4 Operating the AF (Auto Focus) Function (Only Models with AF Function) E15

3-5 Operating the IS Function (Only Models with IS Function) E15

4 Other Functions and Options E18

4-1 Checking for Low Power E18

4-2 Using an External Power Source E18

4-3 Heater System (Option) E18

4-4 Wiper System (Option) E18

4-5 Nitrogen Gas Filling (Option) E19

4-6 Zoom Control Selecting Switch (Only XJ27x AF and XJ27x) E19

5 SPECIFICATIONS E20

APPENDIXES DISPLAY OPERATION MANUAL

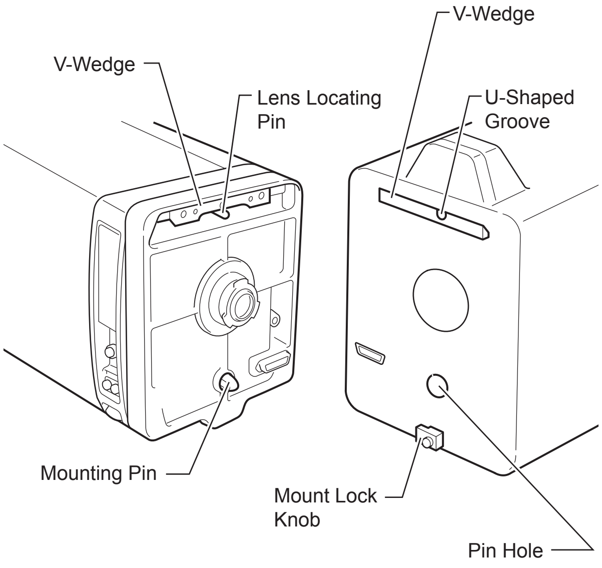
INDEX END

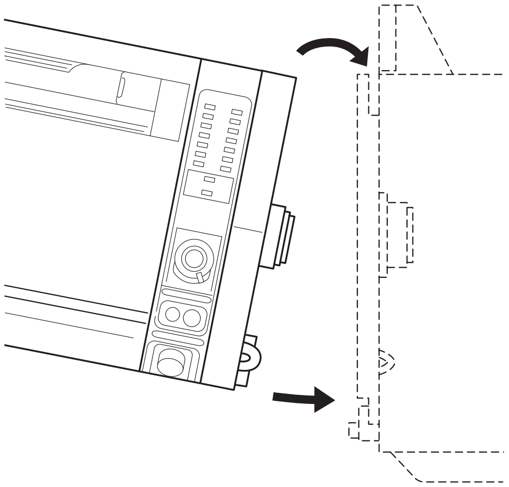
1 HOW TO MOUNT

1-1 Mounting the Lens onto the Camera

Mounting the Lens onto the Large-sized Camera

1. Make sure that the panning and tilting mechanism of the cam head on the tripod/pedestal is securely locked.
2. Turn the mount lock knob of the camera 90 degrees counterclockwise as viewed from the lens. Also, remove the protection plate/cap from the camera.
3. Remove the connector cap(s) on the rear surface of the lens and the dust cap.
4. Carefully holding the lens with both hands, mount it by hanging the V-wedge of the lens over that of the camera, with aligning the lens locating pin of the lens with U-shaped groove of the V-wedge of the camera.

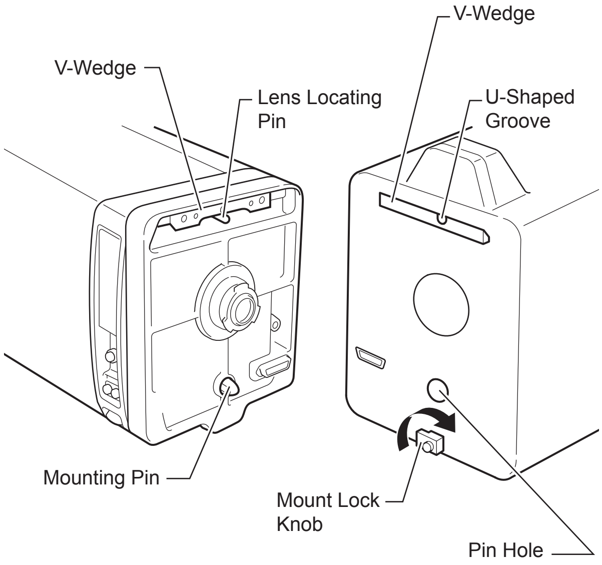




CAUTION

The lens is quite heavy. When lifting the lens, use both hands to hold two recessed handles on both side of the lens shroud, and assure the correct lifting posture.
Failure to do so may cause the lens to drop, resulting in damage to the lens and/or injury.

5. After lining up the lens correctly, press the lens toward the camera, and at same time make sure that the mounting pin at the bottom of the lens mount is fitted securely into the corresponding pin hole on the camera. Then, turn the mount lock knob of the camera clockwise (to the direction indicated by the arrow/see the figure below) to secure the lens to the camera.



*** (NOTE)**

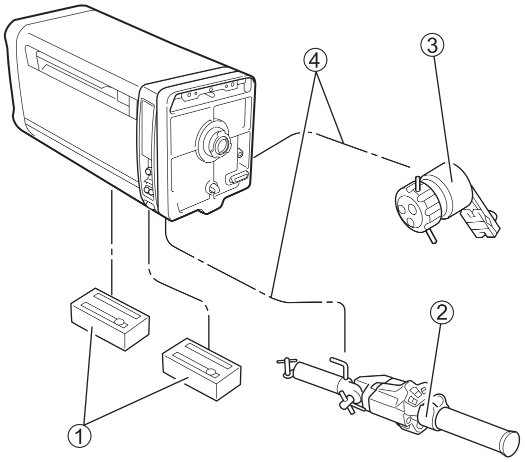
- The connector(s) on the lens and the camera are connected automatically by performing steps **4** and **5**. If an attempt is made to connect them forcibly without lining up the spring pin with the pin hole as described in step **5**, the lens and camera connectors may be damaged.
- After installing all units, including the operation's accessories, on tripod or pedestal, adjusting work for balance of the cam head is required.

Mounting the Lens onto the Portable Camera

When using the portable camera, the supporter to mount the lens is required.
Depending on the camera models, the supporters which can be used with a camera differ. For details, contact your Canon dealer or your Canon sales representative.

1-2 Mounting the Accessories for Full Servo Operation

The servo demand is mounted and connected as shown in the figure below. When mounting the various demands, refer to the operation manual for the respective demand.



① Servo module
② Zoom servo demand
③ Focus servo demand
④ Demand cable

Mounting the Servo Module onto the Lens

It is necessary to mount the servo module to the zoom and focus couplings located in the bottom compartment of the lens.

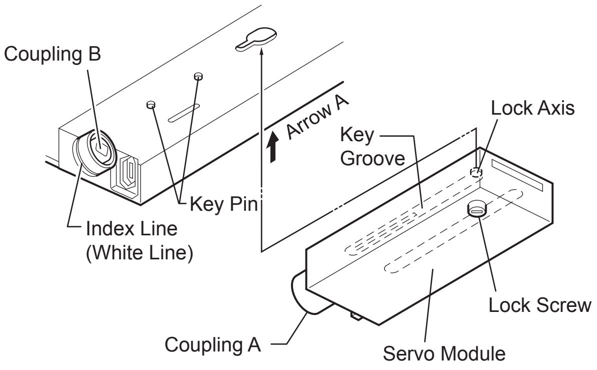
*** (NOTE)**

The same servo module is used for both zoom and focus couplings. So, it can be mounted on either the zoom or focus coupling.

1 Before mounting a module to the lens, turn the lock screw of the module counterclockwise until the lock axis comes out to its a half way of length.

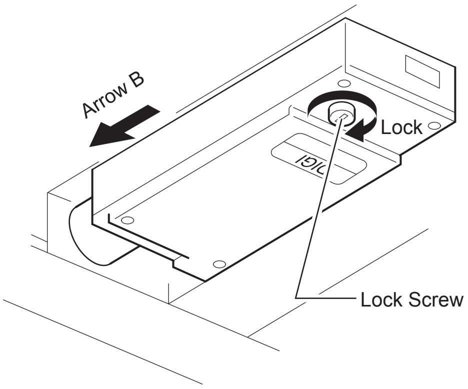
2 Press the module in the direction of arrow “A”, so that the key pins on the lens are inserted in the key grooves of the module.

Bottom compartment of the lens



3 Mate the coupling A of the module with the coupling B of the lens. And then, fully push the module in the direction of arrow “B” until it stops.

4 Finally, turn the lock screw of the module clockwise to secure it. By using a coin, tighten firmly the lock knob.



Next, as the same procedure, install the servo module on the other joint. It does not matter which is installed first, either the zoom or the focus.

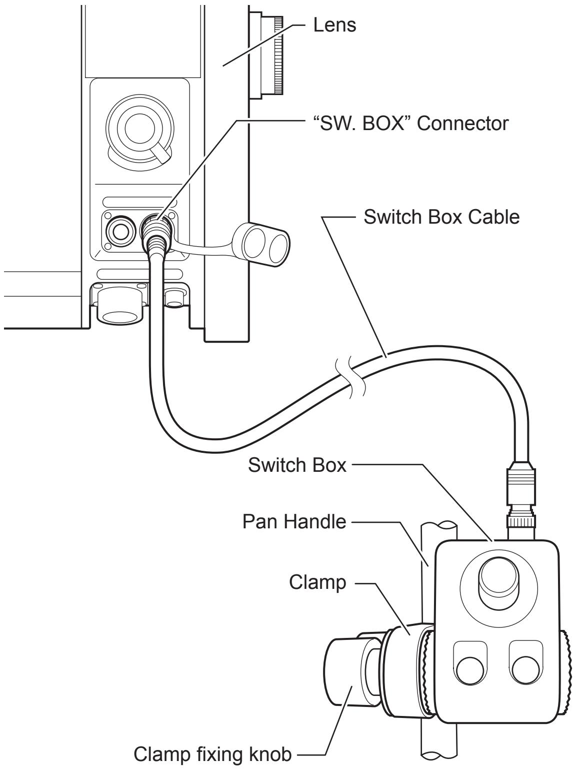
*** (NOTE)**

When mating couplings A and B, push the servo module in completely, so that the index line (white line) on the circumference of coupling B is entirely hidden. If index line is not completely hidden, the servo module may fail to operate, or it may generate abnormal acoustic noise.

Mounting the Switch Box

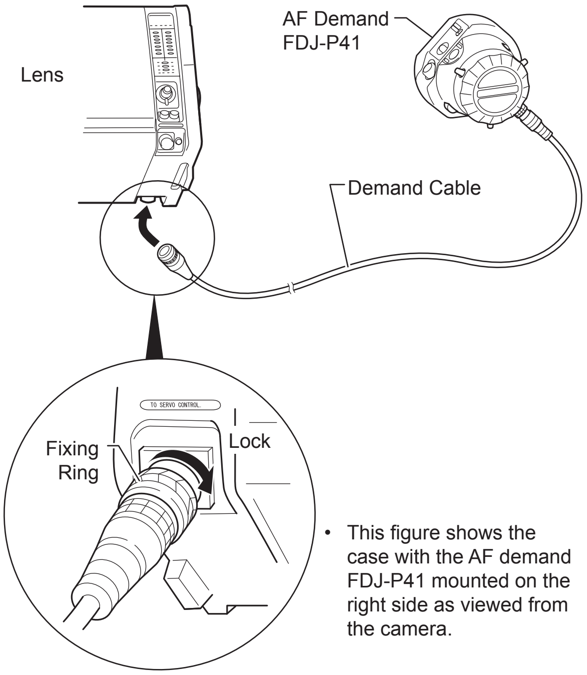
1 Mount the switch box to the panhandle of the tripod, using the attached clamp.

2 Connect the switch box to the lens, using the included cable.


Lens
"SW. BOX" Connector
Switch Box Cable
Switch Box
Pan Handle
Clamp
Clamp fixing knob

Mounting the AF (Auto Focus) Demand (Only Models with AF Function)

The AF demand unit is mounted and connected as shown in the figure below. Follow the procedure in the operation manual for the demand to mount and connect the demand.


AF Demand
FDJ-P41
Lens
Demand Cable
TO SERVO CONTROL
Fixing Ring
Lock

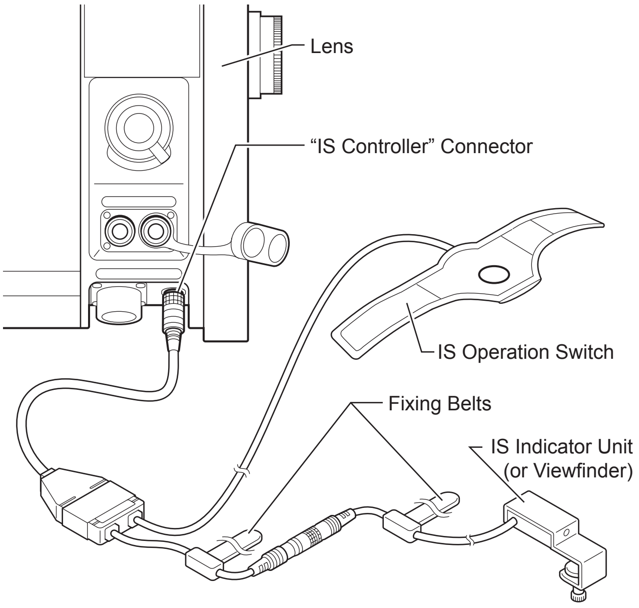
- This figure shows the case with the AF demand FDJ-P41 mounted on the right side as viewed from the camera.

Mounting the Accessories for IS Operation (Only Models with IS Function)

Mounting the IS operation unit

1 Plug the connector of the IS operation unit into the receptacle labeled "AUX" on the left side of the lens (as viewed from the camera).

2 The IS Indicator unit on the other branch of the cable comes with an anchoring screw. Mount it to the location (such as on the edge of the viewfinder) where the ON/OFF status of the LEDs can be observed.
The IS indicator unit is not necessary for the camera equipped with display function.

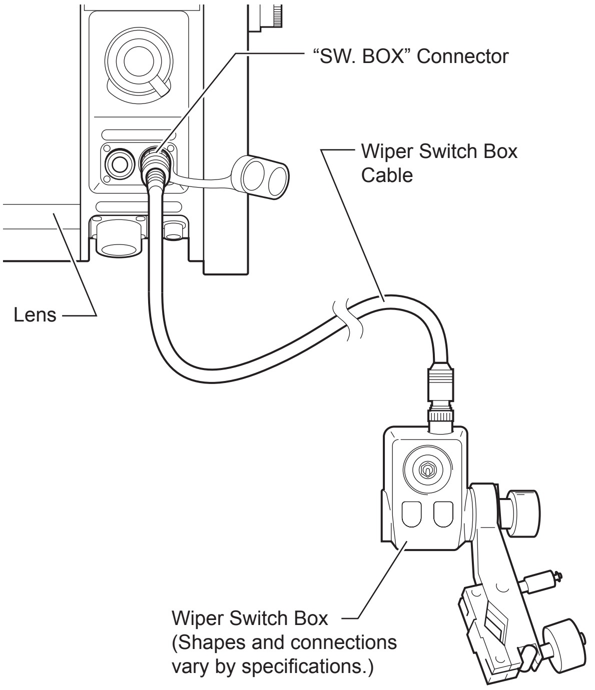

Lens
"IS Controller" Connector
IS Operation Switch
Fixing Belts
IS Indicator Unit (or Viewfinder)

Seeing the IS operating statuses in the viewfinder

When using a camera provided with a function for receiving the signals indicating that the IS function is operating or stopped from the lens side and displaying this operating status on its viewfinder, it is possible to connect only the IS Operation Switch and operate it to perform these functions. Remove the IS indicator unit that is connected partway along the cable from the IS operation unit.

Connecting Wiper Switch Box (Option)

When using separately purchased switch box for the wiper equipped lens, connect it to the lens using the dedicated cable. (Connection method varies by switch box specifications.)

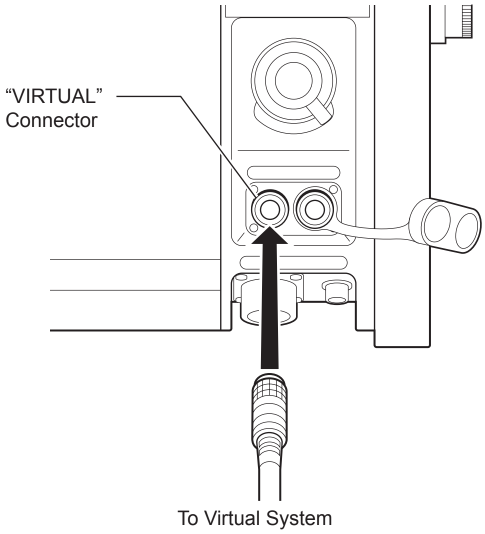

"SW. BOX" Connector
Wiper Switch Box Cable
Lens
Wiper Switch Box (Shapes and connections vary by specifications.)

Connecting the "VIRTUAL" Cable (Only Models with "VIRTUAL" Connector)

The lens is equipped with the connector labeled "VIRTUAL" on its left side (as viewed from the camera). This connector can be used for connection with an interface to virtual systems. Zoom, focus and iris signals can be output in three types of communication data; analog signal, encoder pulse train and RS-422.

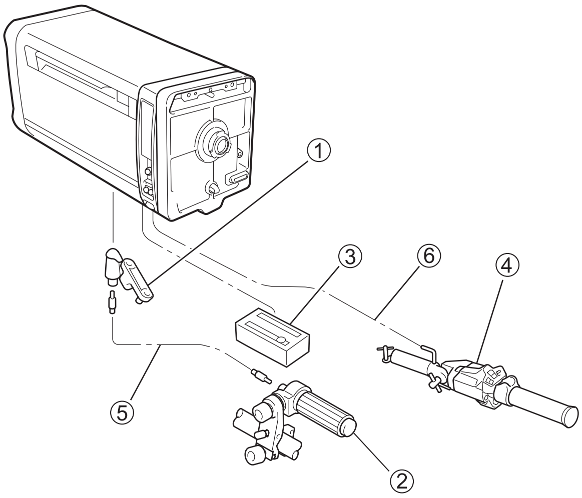
* (NOTE)

Connector location may vary by models.


"VIRTUAL" Connector
To Virtual System

1-3 Mounting the Accessories for Semi-servo Operation

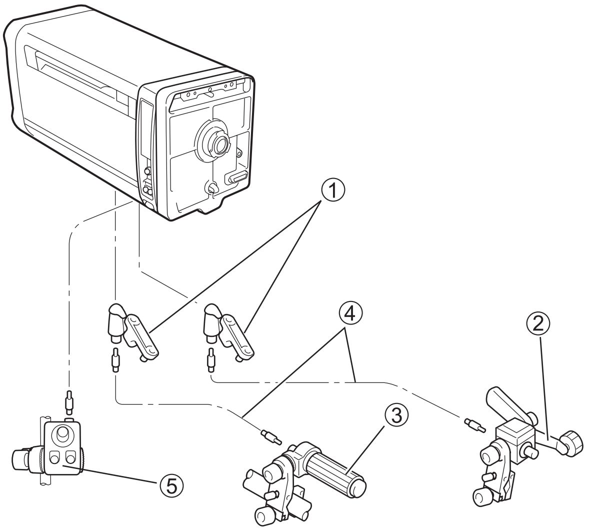
The zoom servo demand and the flexible focus control unit are mounted and connected as shown in the figure below. When mounting the various demands, refer to the operation manual for the respective demand.



① Flexible module
② Flexible focus control unit
③ Servo module
④ Zoom servo demand
⑤ Flexible cable
⑥ Demand cable

1-4 Mounting the Accessories for Manual Control System

Mount and connect the flexible zoom and focus control units as shown in the figure.
When mounting the various demands, refer to the operation manual for the respective demand.



① Flexible module
② Flexible zoom control unit
③ Flexible focus control unit
④ Flexible cable
⑤ Switch box unit

Mounting the flexible module

It is necessary to mount the flexible module to the zoom and focus couplings located in the bottom compartment of the lens.

*** (NOTE)**

The same flexible module is used for both zoom and focus couplings. So, it can be mounted on either the zoom or focus coupling.

1 Before mounting the module to the lens, turn the lock screw of the module counterclockwise until the lock axis comes out to its a half way of length.

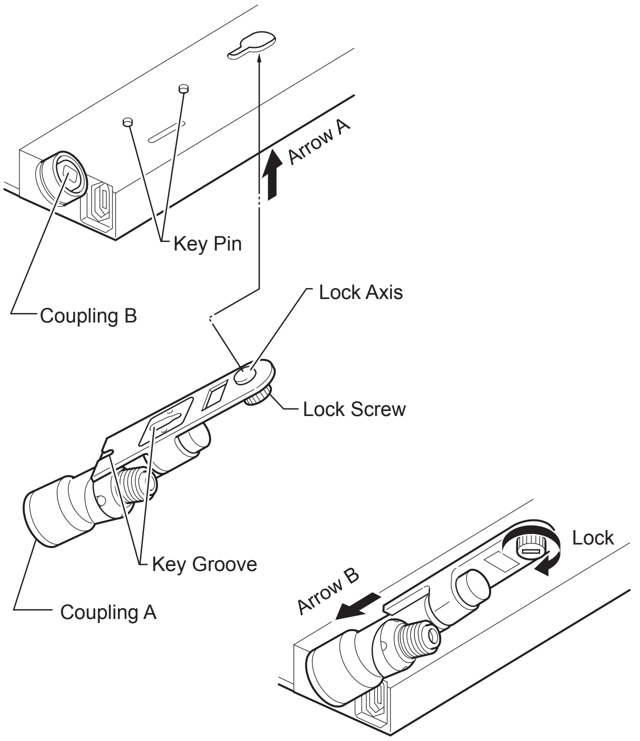
2 Press the module in the direction of arrow “A”, so that the key pins on the lens are inserted in the key grooves of the module.

3 Mate the coupling A of the module with the coupling B of the lens. And then, fully push the module in the direction of arrow “B” until it stops.

4 Finally, turn the lock screw of the module clockwise to secure it. By using a coin, tighten firmly the lock knob.

Next, as the same procedure, install the flexible module on the other joint. It does not matter which is installed first, either the zoom or the focus.

Bottom compartment of the lens



2 PREPARATION

2-1 Initialize Operation

(Only Models with a Display)

This lens has a built-in encoder for a position sensor of zoom, iris and focus, and enables high-accuracy control and advanced for virtual interface. The correct position must be detected for these functions to operate correctly.
The Auto [ON]/Manual [OFF] setting of initialization can be set from the information display.

Auto [ON]	The lens is automatically initialized on power-up. (When in servo mode)
Manual [OFF]	After the power is turned on, position detection is performed when the lens passes the specific position (normally near the center) in the course of lens operation.

* Default setting at factory: OFF

For the detailed setting method, refer to the “**Display Operation Manual**” at the end of this Operation Manual.

How to detect the position of ZOOM

Initialize operation	How to detect the position
ON (Auto)	When the power is turned on, the lens automatically detects the position. Then, it returns to the position where it used to be when the power was turned on.
OFF (Manual)	Immediately after the power is turned on, the lens operates at a temporary position, and the position is corrected when the lens passes the specific position and the position is detected.

How to detect the position of FOCUS

Initialize operation	Demand	How to detect the position
ON (Auto)	Connected	When the power is turned on, the lens automatically detects the position. Then, it returns to the position instructed by command from the demand.
	Not connected	When the power is turned on, the lens automatically detects the position. Then, it returns to the position where it used to be when the power was turned on.
OFF (Manual)	Connected	When the power is turned on, the lens automatically detects the position. Then, it returns to the position instructed by command from the demand.
	Not connected	The lens does not automatically detect the position when the demand is not connected. When the demand is connected, the lens automatically detects the position. Then, it returns to the position instructed by command from the demand.

When position detection is failed:

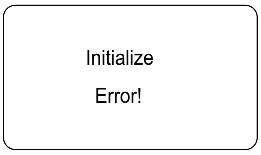
- The position signal sent from the lens to the camera and its indication on the information display will be incorrect.

Notes

- Iris is always initialized when powered on regardless of auto mode or manual mode.
- During initialization, lens operation is disabled. After initialization is completed, the lens returns to the position where it used to be before initialization. However, if the lens is operated in the position servo mode, the lens moves to the currently controlled position.
- The initialization operation can be enabled/disabled on the information display. When any initialization operation is changed, turn off then on the power for the changes to take effect.

The “Initialize Error!” message appears **when the servo module is not mounted correctly**, the lens is forcibly locked, or some other reason.
In such case, check the lens condition, clear the problem, and then turn off and on the power again.

Initialize Error! message

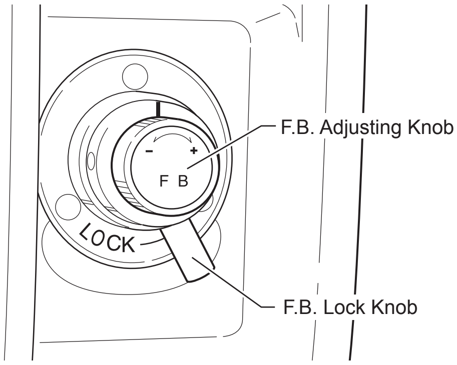


Initialize
Error!

2-2 Back Focus Adjustment

If the relationship between the image plane of the zoom lens and that of the television camera is incorrect, the object goes out of focus when the lens is zoomed. Follow the steps below to adjust the back focus of the lens.

1. Select an object at an appropriate distance (XJ27xAF/XJ27x/XJ23x: 3 to 5 m, XJ100xAF/XJ100x/XJ95x/XJ86xAF/XJ86x/XJ75x/XJ72x/XJ60x: 10 to 15 m recommended). Use any object with sharp contrast to facilitate the adjustment work.
2. Set the lens to 1x [status without using an extender].
3. Set the iris fully open.
4. Set the lens to the telephoto angle.



5 Bring the object into focus by focus operation.

6 Set the lens to the widest angle.

7 Loosen the F.B. lock knob, and then turn the F.B. adjusting knob to bring the object into focus.

8 Repeat steps **4** to **7** several times, until the object is brought into focus at both the widest angle and telephoto ends.

9 After making sure that the object is in sharp focus, tighten the F.B. lock knob.

The adjustment procedure is now completed.

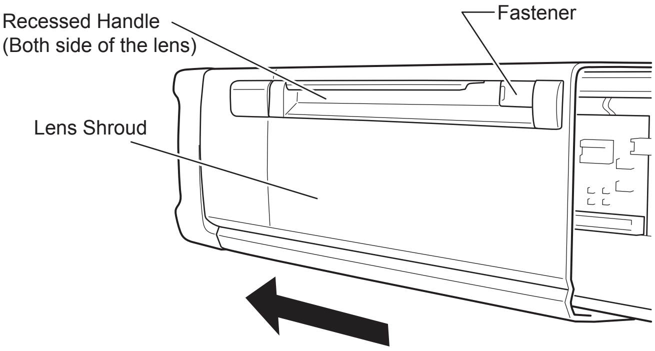
2-3 Removing and Installing the Lens Shroud

When any electrical setting or adjustment is required, remove and install the lens shroud following the steps below.

Fastener type

1 Release the fasteners on both sides of the lens shroud, then pull the shroud forward to remove from the lens body.

2 When installing the lens shroud back in place, align the shroud to the guide rails of the lens body, and then push the shroud until it stops at the end of the mount. Press the shroud fasteners near to the end of the mount side to lock the shroud.



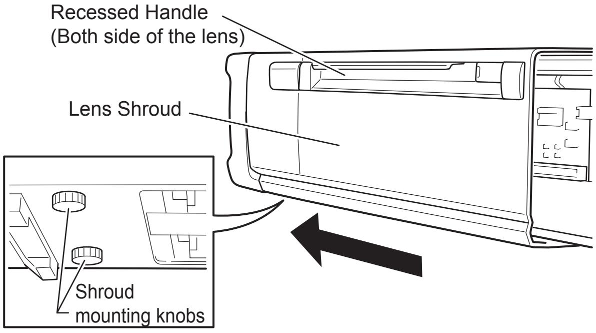
*** (NOTE)**

Make sure that the fasteners of the lens shroud are always locked when it is mounted on the lens.

Knob type

1 Turn the shroud mounting knobs on the bottom of the lens shroud counterclockwise.

2 Hold two recessed handles on both side of the lens shroud, and then pull and remove the shroud from the lens body.



3 When putting the lens shroud back on the lens body, align the shroud to the guide rails of the lens body, and then push the shroud until it is stopped at the end of the mount.
Turn the shroud mounting knobs on the bottom clockwise.

*** (NOTE)**

With the lens shroud mounted on the lens, check that the shroud mounting knobs are secured tightly at all times. If these knobs are not perfectly tight, the lens shroud may work free from the main unit and drop off when the camera is tilted down.

2-4 Iris Gain Adjustment

The iris gain is set to the middle of the adjusting range at the factory. However, if the iris gain needs to be changed for some reason, follow the steps below. These steps can be taken by the trimmer adjustment or on the information display. (The setting implemented last takes precedence)

*** (NOTE)**

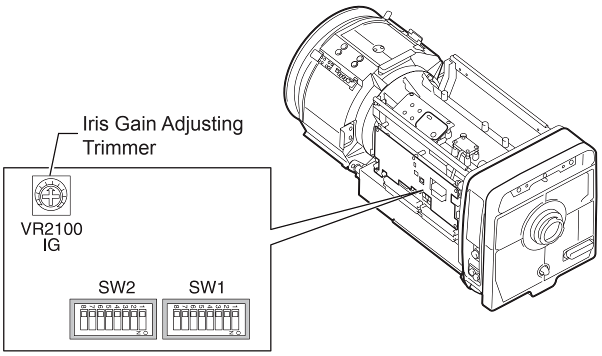
For other iris adjustment such as iris ends adjustment or video level adjustment when the extender is used, contact Canon dealer or your Canon sales representative.

Trimmer Adjustment

1 Remove the lens shroud from the lens body.

2 Check that DIP switch (iris control select switch) is set to the “OFF” position (refer to the table below). Depending on the command signals from the camera, the iris would not be set to auto iris mode although the switch was set to the “OFF” position. For details, refer to the “Iris mode” table in 2-5 “Iris Mode Setting (Option)”.

3 Turn the iris gain adjusting trimmer for the gain adjustment. To increase the gain, turn the trimmer clockwise. To decrease the gain, turn the trimmer counterclockwise.



DIP Switch

IESD/IDSD

XJ100xAF, XJ95x, XJ86xAF, XJ80x, XJ76x, XJ27xAF	(SW2) No. 4
XJ100x, XJ86x, XJ75x, XJ72x	(SW1) No. 4
XJ60x, XJ27x, XJ23x	(SW1) No. 8

IESDA

XJ60x, XJ27x, XJ23x	(SW2) No. 4

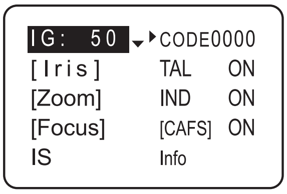
Making Adjustments on the Information Display (Only Models with a Display)

1 Perform “Trimmer Adjustment” steps **1** and **2**.

2 Information display operation procedure:

a. Push the DISPLAY switch to bring up the display.

(a)



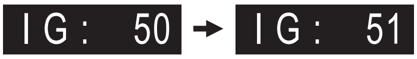
```
IG:  50 ▾▸CODE0000
[Iris]     TAL    ON
[Zoom]     IND    ON
[Focus]    [CAFS] ON
IS         Info
```

b. When the screen starts flushing by pushing the cursor button, move the ◀ (left) or ▶ (right) cursor button until the value to be set appears on the screen.

Selection item	01	–	99
Function	Minimum gain		Maximum gain

Default value: 50

(b)



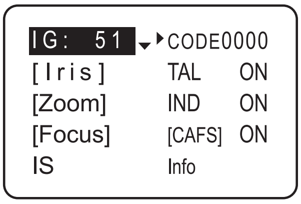
```
IG:  50 ➔ IG:  51
```

* (NOTE)

- To perform the gain adjustment while checking the iris operation, set the iris mode of the camera to the [AUTO] position.
- To determine the maximum gain, set the trimmer at a level where no hunting occurs.

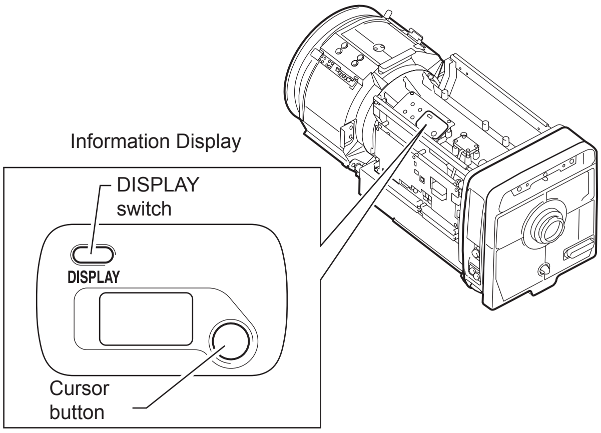
c. Push the cursor button. This completes the adjustment.

(c)



```
IG:  51 ▾▸CODE0000
[Iris]     TAL    ON
[Zoom]     IND    ON
[Focus]    [CAFS] ON
IS         Info
```

For the detailed setting method, refer to the “**Display Operation Manual**” at the end of this Operation Manual.



2-5 Iris Mode Setting (Option)

DIP switch (iris control select switch) was set to the “OFF” position at the factory.
See the table below to find the relationship between the position of the switch and signals.

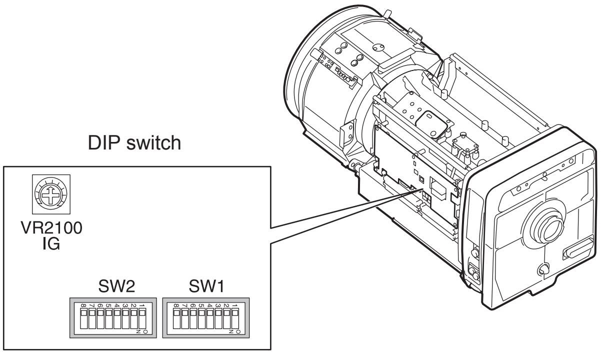
Iris mode

Iris control and operation depend on the following three signals

1. Enforced auto iris command signal from the camera system (IRIS ENF)
   (Some camera models are not capable to provide this signal.)
2. AUTO/REMOTE iris command signal from the camera system (IRIS A/R)
3. Setting position of DIP switch inside the lens body (Refer to the table under “Trimmer Adjustment” on the previous page.)
   (“ON” position: I.LOCAL/“OFF” position: I.CAMERA However, I.LOCAL may not be usable depending on the specifications.)

The table below lists the relationship between these three signals and iris mode.

Position of the DIP switch	Command signal from camera		Iris Control signal from	Iris mode
	IRIS ENF	IRIS A/R		
OFF	ON	Auto	Camera	Auto iris
OFF	ON	Remote	Camera	Remote iris
OFF	OFF	Auto	Camera	Auto iris
OFF	OFF	Remote	Camera	Remote iris
ON	ON	Auto	Camera	Auto iris
ON	ON	Remote	Camera	Remote iris
ON	OFF	Auto	Switch box	Remote iris
ON	OFF	Remote	Switch box	Remote iris



2-6 Setting on the Information Display

The table below shows the functions that can be set from the information display. For the detailed setting method, refer to the "**Display Operation Manual**" at the end of this Operation Manual.

Functions that can be set from the information display			Reference page in appendixes
Lens name	Lens code setting		E4
Initialize operation	Initialize operation setting		E4
Iris control	Iris gain	Setting the auto iris gain	E4, E5
		Setting the remote iris gain	E5
	Setting the iris correction to ON/OFF		E5
	Setting the iris close detection to ON/OFF		E6
Zoom control	Setting the zoom servo start characteristics		E6
	Setting the zoom servo stop characteristics		E6
	Setting the zoom mechanism end stop characteristics		E6
	Preset	Setting the zoom servo start characteristics	E7
		Setting the zoom servo stop characteristics	E7
	Setting the analog demand curve characteristics		E7
	CAM mode settings		E8
	Setting the servo mode type from the zoom demand		E8
Focus control	Focus demand curve characteristics		E9
Tally	Setting the tally lamp ON/OFF		E6
	Tally lamp light quantity setting		E11
Indicator	Setting the indicator ON/OFF		E8
CAFS	Setting the CAFS ON/OFF		E9
IS	IS mechanical lock setting		E10
	IS operation switch setting		E10
	IS mode setting		E10
Other	Encoder output setting		E11
	Setting the camera serial communication to ON/OFF		E11
	Adjusting the Camera Fol Voltage		E12
Reset operation	Reset to default values		E1

2-7 Incorporable Focus Servo Demand (Option)

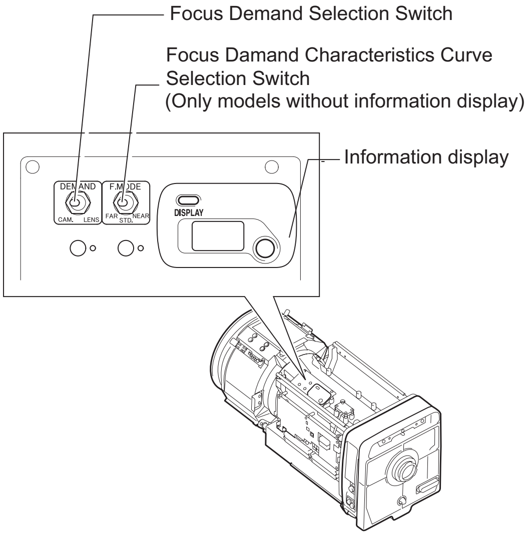
The optional incorporable focus servo demands are offered for some types of camera.

1 Remove the lens shroud from the lens.

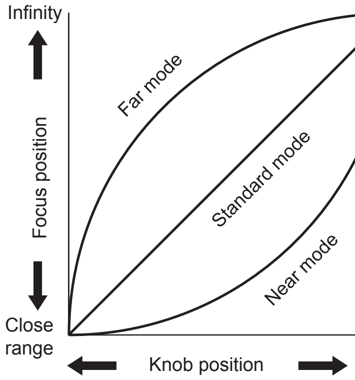
2 Set the focus demand selection switch to the “CAM” position.

* (NOTE)

This switch is usually set to the “LENS” position by default.


Focus Demand Selection Switch
Focus Damand Characteristics Curve Selection Switch (Only models without information display)
Information display
DEMAND
CAM.
LENS
F.MODE
FAR
STD.
NEAR
DISPLAY

3 Set the focus demand characteristics curve mode on the informaiton display. One mode can be selected among the following three curves. For the detailed setting method, refer to the “**Display Operation Manual**” at the end of this Operation Manual. Users of models without the information display can select the mode with the focus demand characteristics selection switch.



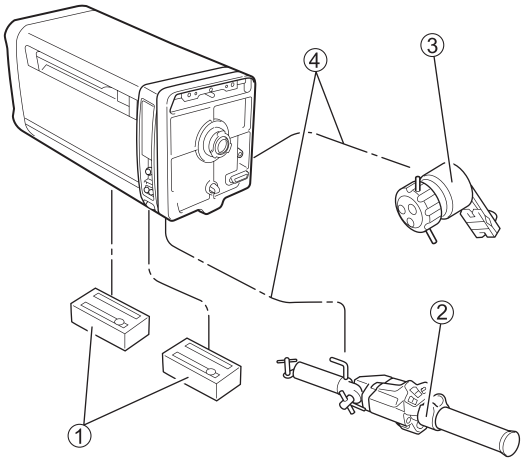
STD (Standard mode):	The Standard mode has the characteristics where the relationship between the rotation amount of the control knob and the moving amount of the focus lens group is almost in linear.
FAR (Far mode):	The Far mode facilitates focusing on an object in the far end, by making the far end curve characteristics gentle to increase the far end resolution. This mode is useful when shooting an object in comparatively far distance in sports events, for example.
NEAR (Near mode):	Contrary to the Far mode, the Near mode facilitates focusing on an object in the near end, by making the near end curve characteristics gentle to increase the near end resolution. This mode is useful when shooting an object in a limited space such as a studio.

3 OPERATION

3-1 Zoom and Focus Operation

Full-servo System Operation

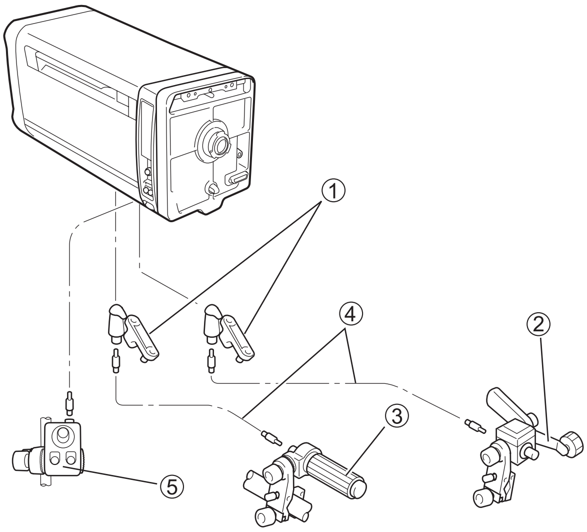
Zoom and Focus operations are performed based on a configuration as shown in the figure below.
For the operating procedure, refer to the operation manual for the respective unit.



① Servo module
② Zoom servo demand
③ Focus servo demand
④ Demand cable

Manual System Operation

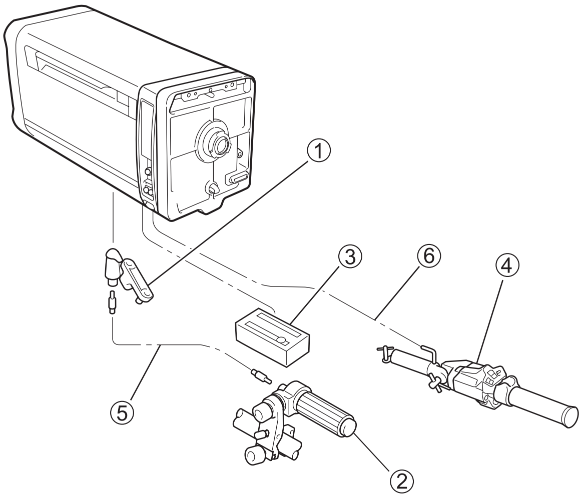
Zoom and Focus operations are performed based on a configuration like that shown in the figure below. For the operating procedure, refer to the operation manual for the respective unit.



① Flexible module
② Flexible zoom control unit
③ Flexible focus control unit
④ Flexible cable
⑤ Switch box unit

Semi-servo System Operation

Zoom and Focus operations are performed based on a configuration like that shown in the figure below.
For the operating procedures, refer to the operation manual for the respective unit.



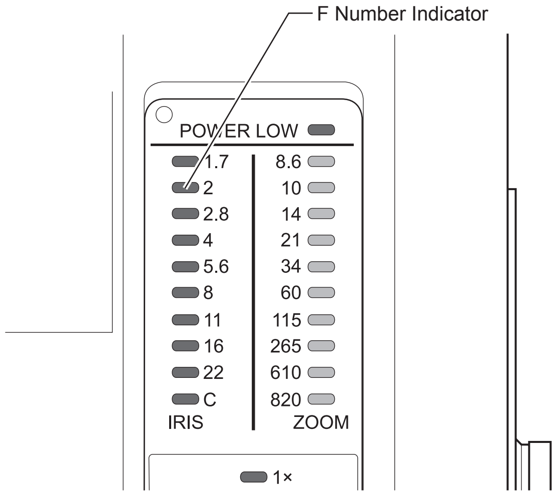
① Flexible module
② Flexible focus control unit
③ Servo module
④ Zoom servo demand
⑤ Flexible cable
⑥ Demand cable

3-2 Iris Operation

Normally, lens iris operation is performed by the position servo control method using commands from the camera CCU. Control can be switched between auto iris control and remote iris control.
The camera operator can also perform remote iris control using a switch box (special version) as a special specification.

Control from the Camera

Both automatic and remote iris control are usually operated from the CCU. (Refer to the camera operation manual on how to operate.)
During the shooting, an approximate F number (iris value) can be checked with the indicator panel on the left side of the lens, as viewed from the camera.



The value indicated by the indicator varies depending on the model.

Setting the iris control select switch

The DIP switch was set to the “OFF” position (I.CAMERA) at the factory prior to shipment so that the iris can be operated from the camera. If the iris operation is disabled, follow the steps below to check the setting position of DIP switch (refer to the table below).

IESD/IDSD

XJ100xAF, XJ95x, XJ86xAF, XJ80x, XJ76x, XJ27xAF	(SW2) No. 4
XJ100x, XJ86x, XJ75x, XJ72x	(SW1) No. 4
XJ60x, XJ27x, XJ23x	(SW1) No. 8

IESDA

XJ60x, XJ27x, XJ23x	(SW2) No. 4

“OFF” position: Iris operation is enabled from the camera.
“ON” position: Iris operation is enabled from such as switch box.

1. Remove the lens shroud.
2. Check that DIP switch is set to the “OFF” position. If the switch is set to “ON” position, change the setting to the “OFF” position.

Control from the Switch Box

When a switch box which is capable to control the iris function of the lens is mounted, the iris function of the lens is controlled by it.

Setting the iris control select switch

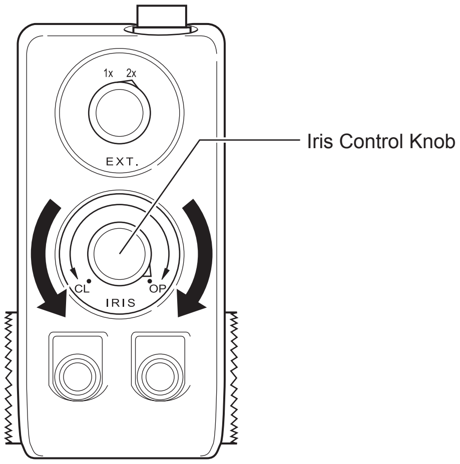
Settings must be performed at the lens side in order for the iris to be controlled from the switch box. Follow the setting steps below.

1. Remove the lens shroud.
2. Change the DIP switch setting to the “ON” position (I.LOCAL).

Controlling

Control the iris by turning the iris control knob as set forth below.

Turning the knob clockwise:
The iris moves in the opening direction.
Turning the knob counterclockwise:
The iris moves in the closing direction.



As when the iris is to be controlled from the camera, the approximate F number can be monitored on the indicator panel.

*** (NOTE)**

- See the section “Mounting the Switch Box” (p. E3) for details of how to mount and connect the switch box.
- Refer to the table “Iris mode” in the section 2-5 “Iris Mode Setting (Option)” to understand the relationship among the command signals from camera, iris control device, and the position of the iris control select switch.

3-3 Extender Operation

Remote Operation

Remote controlling from the zoom servo demand and switch box

Remote extender control can be performed from the zoom servo demand, switch box, and other accessories.

Remote controlling from the camera

On the camera equipped with the extender control function, remote extender control can be performed from the extender control device mounted on the CCU or the camera head. Refer to the operation manual for the respective TV camera.

*** (NOTE)**

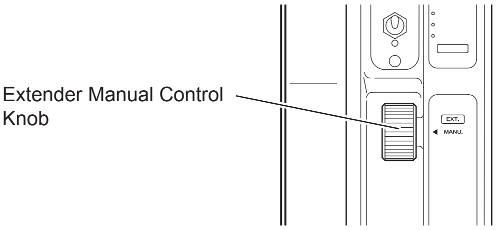
- When the zoom servo demand or the switch box is used together, the extender is controlled by the command from the last operated device.
- The extender(s) can be selected by the extender manual control knob even during remote control.

Manual Operation

In case of emergency such as when the remote extender control is failed, or when any of above three extender control devices is unavailable, the extender(s) can be controlled manually.

Controlling

Manually turn the extender manual control knob to operate the extender(s).
The current extender position is shown by the LED on the indicator. (All the extender LEDs on the indicator panel remain off while operations are being performed.)



3-4 Operating the AF (Auto Focus) Function

(Only Models with AF Function)

An AF demand is necessary to operate the AF function.
For more information about AF operation and AF function settings, please refer to the AF demand operation manual.

AF function notes

- Focusing using the AF may not be possible when shooting the following types of subjects.

  Examples of objects difficult to focus using the AF
  - Subjects with low contrast: Blue sky or a single-colored, flat surface
  - Subjects having particularly fast movement
  - Subjects at night or dark locations

- The back focus of the lens may change slightly due to variations in the ambient temperature. To obtain the best auto focus performance, it is advisable to confirm that the back focus is appropriate.

3-5 Operating the IS Function

(Only Models with IS Function)

Knowing the Basic Operation

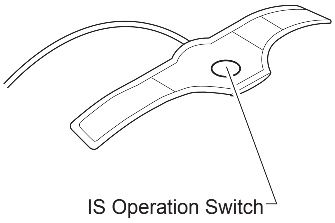
If the image shakes noticeably, turn on the IS function to stabilize the image.
Some IS characteristics may cause the image to move in an unnatural manner and not as intended when panned or tilted quickly. This is because the panning or tilting motion is mis-detected as a vibration, and the IS function is activated to correct it. Select the operating characteristics (STD) so that unnatural movements from panning and tilting are minimized. In addition, note that image stabilizing performance may not be fully delivered during the warming up time.

Setting the IS Preferences

During shooting, the IS function can be turned ON/OFF using the IS operation switch or other accessory.

Using the IS operation switch

Press, release, or hold down the center button to control the IS function.


IS Operation Switch

Using the accessories with IS operation switch function

When using an accessory with IS operation function, refer to the operating instructions of the accessory.

* (NOTE)

The IS function activated by pressing, releasing or holding down the button varies according to the lens setting.

Setting the IS operation switch mode

(For models without a display)

<Selecting ALT/MON>

ALT	The IS function state alternates between “IS SW-ON” and “IS SW-OFF” each time the IS operation switch is pressed.
MON	The IS function state is momentarily set to “IS SW-ON” while the IS operation switch is held down.

“ALT” is set by default.

ALT/MON selection.......... ALT : Set No.7 to OFF.
MON : Set No.7 to ON.
(At the factory, No.7 was set to the OFF position.)

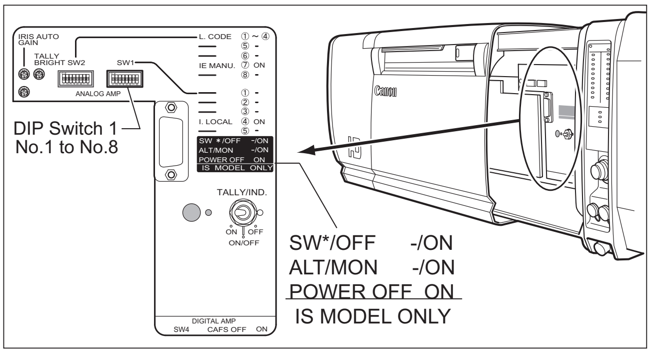
<Selecting SW*/ OFF>

Select the IS operation mode (OFF: IS STD.) when IS operation switch is OFF.

When SW* is selected:
When the IS operation switch is ON, the IS function operates at the characteristics preset at the IS selector switches (it stops when OFF is selected). When the IS operation switch is OFF, the IS function operates at the standard characteristics (STD).

When OFF is selected:
When the IS operation switch is ON, the IS function operates at the characteristics preset at the IS selector switches (it stops when OFF is selected). (The function operates for both the H and V directions.)
When the IS operation switch is OFF, the IS function stops.

SW * / OFF selection....... SW * : Set No.6 to OFF.
SW OFF : Set No.6 to ON.
(At the factory, No.6 was set to the ON position.)

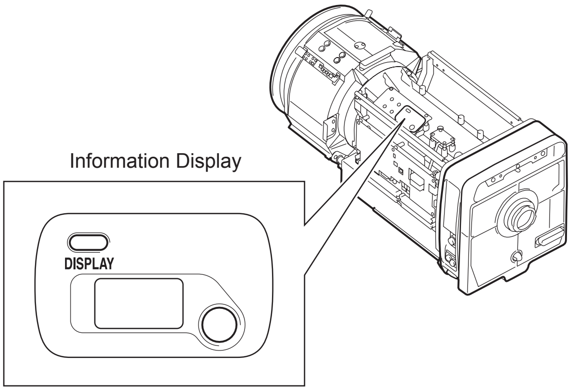

IRIS AUTO GAIN
TALLY BRIGHT SW2
SW1
ANALOG AMP
L. CODE ①~④
⑤ -
⑥ -
IE MANU. ⑦ ON
⑧ -
① -
② -
③ -
I. LOCAL ④ ON
⑤ -
SW *∕OFF -/ON
ALT/MON -/ON
POWER OFF ON
IS MODEL ONLY
TALLY/IND.
ON OFF
ON/OFF
DIGITAL AMP
SW4 CAFS OFF ON
DIP Switch 1
No.1 to No.8
SW*/OFF -/ON
ALT/MON -/ON
POWER OFF ON
IS MODEL ONLY

* (NOTE)

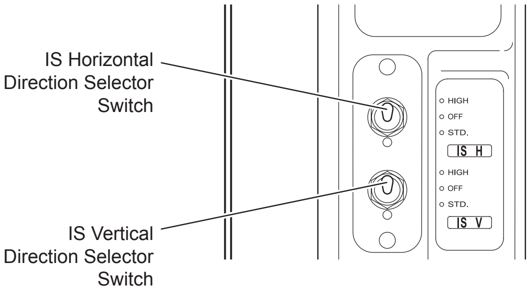
DIP switch 1 No. 8 is the IS main power switch. Normally, the switch is kept at the OFF position.

(For models with a display)

Change the setting on the information display.
For details on the information display, refer to the “**Display Operation Manual**” at the end of this Operation Manual.


Information Display
DISPLAY

Setting the Image Stabilizing Direction and Characteristics


IS Horizontal Direction Selector Switch
IS Vertical Direction Selector Switch
HIGH
OFF
STD.
IS H
HIGH
OFF
STD.
IS V

To select one of the following modes, operate the IS horizontal (or vertical) direction selector switch.

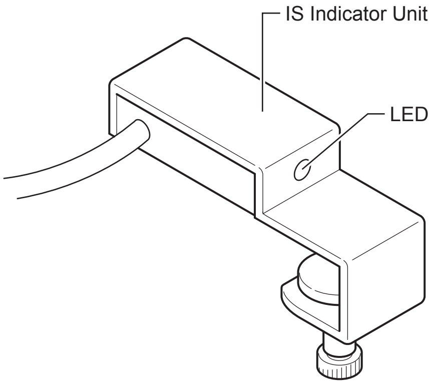
Standard characteristics (STD.)	This mode minimizes unnatural movements by implementing special processing for the low-frequency shaking caused by slow camera work and allows smooth operation during regular camera operation.
Maximum characteristics (HIGH)	This item is set to ensure that the shaking in all the frequency bands is stabilized at the maximum characteristics. If low-frequency shaking is a concern with stationary shots, the anti-vibration effect is enhanced by selecting the maximum characteristics.
Stop (OFF)	This stops the IS function.

Advanced settings of IS function

Shaded sections ▨ indicate that the IS indicator unit LED is lighted.

IS mode setting	IS SW-ON (Switch is pressed when set to MON) → Selector switch status is applied		IS SW-OFF (Switch is not pressed when set to MON)
	H	V	
OFF	Hi	Hi	OFF
	STD	Hi	OFF
	OFF	Hi	OFF
	STD	STD	OFF
	OFF	STD	OFF
	OFF	OFF	OFF
STD	Hi	Hi	STD
	STD	Hi	STD
	OFF	Hi	STD
	STD	STD	STD
	STD	OFF	STD
	Hi	OFF	STD

* When the power is turned on, the IS function is in IS SW-ON state if the IS operation switch mode is set to “ALT”, and in IS SW-OFF state if set to “MON”.



Checking with the viewfinder

The IS function activation state can also be checked with the viewfinder, if the camera is equipped with the viewfinder capable of indicating it.

For details, refer to the operation manual for the camera.

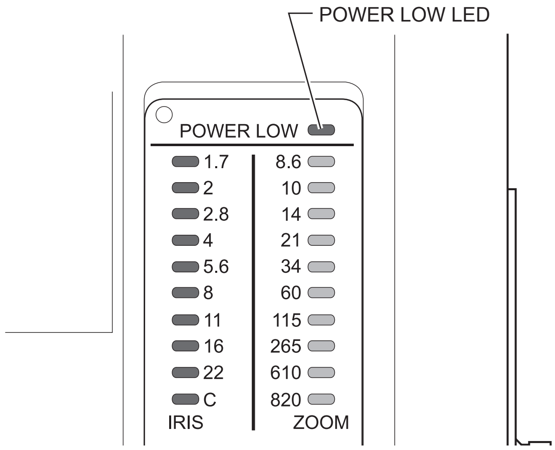
4 Other Functions and Options

4-1 Checking for Low Power

The power low LED, used to indicate low power supply warning, is provided on the indicator panel at the left side of the lens, as viewed from the camera.
According to the supplied voltage, LED indicates:

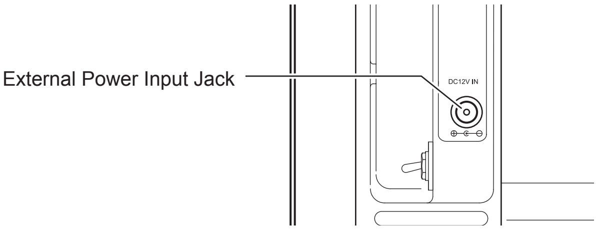
Lit red:	10V or less
Off:	Supplies sufficient voltage

So, when the LED is lit red, countermeasures to raise the supply voltage to 10.5V or above is necessary. Otherwise, the lens may malfunction.


POWER LOW LED
POWER LOW
1.7
2
2.8
4
5.6
8
11
16
22
C
IRIS
8.6
10
14
21
34
60
115
265
610
820
ZOOM

4-2 Using an External Power Source

An external power input jack is provided at the right side of the lens, as viewed from the camera. In case the combination of portable camera and the lens with semi or full servo operation, 12V DC (11-17V DC) should be supplied to the lens through this jack since portable camera does not have enough power consumption to drive semi or full servo operation.


External Power Input Jack
DC12V IN

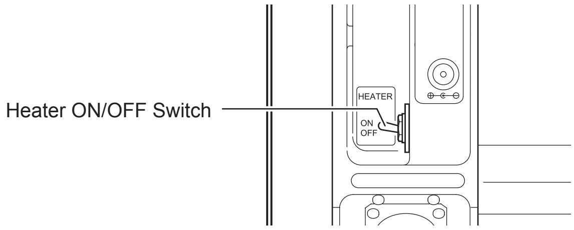
Use a plug complying with EIAJ RC5320A TYPE4 specifications.

4-3 Heater System (Option)

The heater system for warming up the lens to prevent clouding inside the lens can be mounted on the lens. The heater system is operated as follows.

1 Set the heater ON/OFF switch, which is located on the right side of the lens as seen from the camera, to the ON position.

2 To shut down the heater, set the heater ON/OFF switch to the OFF position.


Heater ON/OFF Switch
HEATER
ON
OFF

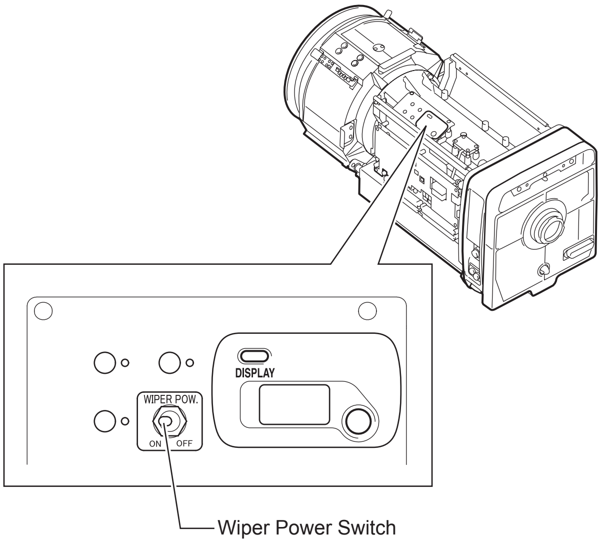
* (NOTE)

A great deal of power is consumed when the heater switch is ON.
For this reason, the circuitry is designed to disable servo zoom operations and servo focus operations.
To perform servo operations, stop using the heater.

4-4 Wiper System (Option)

Checking the wiper power

Check that the power switch of the wiper is set to “ON”.


DISPLAY
WIPER POW.
ON
OFF
Wiper Power Switch

Wiper operation varies according to the mounted accessories. Refer to the operation manual of the accessory to use.

*** (NOTE)**

- Do not operate the wiper with dust, oil, foreign obstacles stained on the glass surface. Otherwise, the glass may be damaged. Completely clean the glass before operation.
- If the wiper is operated in the low-temperature environment or for wiping snow, condensation may form on the glass.
- Do not operate the wiper in a dry condition without moisture. Otherwise, rubber blade deterioration or incomplete wiping may result.
- Replace the rubber blade when worn, deformed, or damaged, or when incomplete wiping occurred. Contact your Canon dealer.
- To use the wiper manually, set the power switch of the wiper to “OFF”.
  Do not manually use the wiper while it is turned “ON”.

4-5 Nitrogen Gas Filling

(Option)

To prevent fog or condensation on the internal surface of the lens, you can fill the lens barrel with nitrogen gas.
Nitrogen gas should be refilled at the periodic overhaul, and before the critical event.

*** (NOTE)**

To refill nitrogen gas, gas canister and filling tool are required.
Contact your Canon dealer or your Canon sales representative.

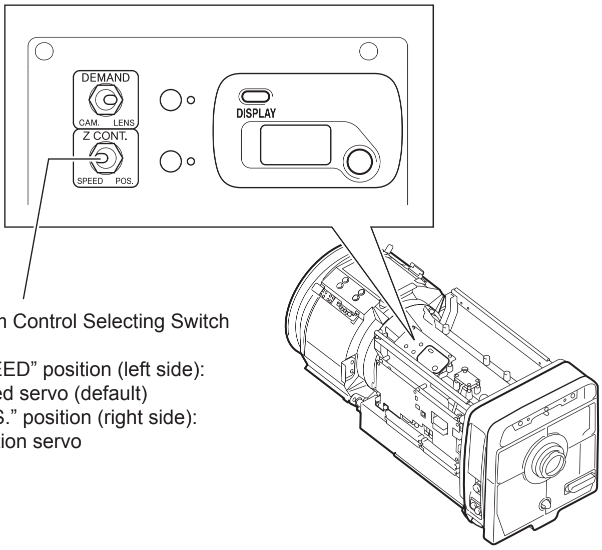
4-6 Zoom Control Selecting Switch

(Only XJ27x AF and XJ27x)

Either the speed servo or position servo can be set as the servo system from the analog zoom demand. This setting is performed using the zoom control selecting switch.

Setting steps

1. Remove the lens shroud from the lens body.
2. Set to the servo type using the zoom control selecting switch.
3. Upon completion of the adjustment, mount the lens shroud on the lens body.



Zoom Control Selecting Switch

“SPEED” position (left side):
Speed servo (default)
“POS.” position (right side):
Position servo

*** (NOTE)**

- Similar setting options to the zoom control selecting switch are also equipped on the information display, however only the status of the servo system is reflected on the display. For that reason, the setting can not be performed on the information display.
- With “POS.” selected, operation can not be performed from the digital zoom demand.

5 SPECIFICATIONS

IESD/IESDA

			XJ100x9.3B AF		XJ100x9.3B	
			4:3 mode	16:9 mode	4:3 mode	16:9 mode
Focal Length		1.0x	9.3–930 mm			
		2.0x	18.6–1860 mm			
Zoom Ratio			100×			
Maximum Relative Aperture		1.0x	1:1.7 (at 9.3–296 mm) 1:4.7 (at 930 mm)			
		2.0x	1:3.4 (at 18.6–592 mm) 1:9.4 (at 1860 mm)			
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	50.6° × 39.1° (at 9.3 mm)	54.6° × 32.4° (at 9.3 mm)	50.6° × 39.1° (at 9.3 mm)	54.6° × 32.4° (at 9.3 mm)
		2.0x	26.6° × 20.1° (at 18.6 mm)	28.9° × 16.5° (at 18.6 mm)	26.6° × 20.1° (at 18.6 mm)	28.9° × 16.5° (at 18.6 mm)
	Tele	1.0x	0.54° × 0.41° (at 930 mm)	0.59° × 0.33° (at 930 mm)	0.54° × 0.41° (at 930 mm)	0.59° × 0.33° (at 930 mm)
		2.0x	0.27° × 0.20° (at 1860 mm)	0.30° × 0.17° (at 1860 mm)	0.27° × 0.20° (at 1860 mm)	0.30° × 0.17° (at 1860 mm)
Minimum Object Distance (M.O.D.)			3.0 m (from lens vertex)			
Object Dimensions at M.O.D.	Wide	1.0x	253.9 × 190.4 cm (at 9.3 mm)	276.4 × 155.5 cm (at 9.3 mm)	253.9 × 190.4 cm (at 9.3 mm)	276.4 × 155.5 cm (at 9.3 mm)
		2.0x	127.0 × 95.2 cm (at 18.6 mm)	138.2 × 77.8 cm (at 18.6 mm)	127.0 × 95.2 cm (at 18.6 mm)	138.2 × 77.8 cm (at 18.6 mm)
	Tele	1.0x	2.54 × 1.90 cm (at 930 mm)	2.76 × 1.56 cm (at 930 mm)	2.54 × 1.90 cm (at 930 mm)	2.76 × 1.56 cm (at 930 mm)
		2.0x	1.27 × 0.95 cm (at 1860 mm)	1.38 × 0.78 cm (at 1860 mm)	1.27 × 0.95 cm (at 1860 mm)	1.38 × 0.78 cm (at 1860 mm)
Zoom Speed			0.6 ± 0.1s Max.			
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.15s		0.8 ± 0.1s	
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

			XJ95x8.6B		**XJ86x13.5B**	
			4:3 mode	**16:9 mode**	**4:3 mode**	**16:9 mode**
Focal Length		1.0x	8.6–820 mm		13.5–1161 mm	
		2.0x	17.2–1640 mm		27–2322 mm	
Zoom Ratio			95×		86×	
Maximum Relative Aperture		1.0x	1:1.7 (at 8.6–340 mm) 1:4.1 (at 820 mm)		1:2.4 (at 13.5–480 mm) 1:5.8 (at 1161 mm)	
		2.0x	1:3.4 (at 17.2–680 mm) 1:8.2 (at 1640 mm)		1:4.8 (at 27–960 mm) 1:11.6 (at 2322 mm)	
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	54.2º × 42.0º (at 8.6 mm)	58.3º × 34.9º (at 8.6 mm)	36.1º × 27.5º (at 13.5 mm)	39.1º × 22.6º (at 13.5 mm)
		2.0x	28.7º × 21.7º (at 17.2 mm)	31.2º × 17.8º (at 17.2 mm)	18.5º × 13.9º (at 27 mm)	20.2º × 11.4º (at 27 mm)
	Tele	1.0x	0.61º × 0.46º (at 820 mm)	0.67º × 0.38º (at 820 mm)	0.43º × 0.33º (at 1161 mm)	0.47º × 0.27º (at 1161 mm)
		2.0x	0.31º × 0.23º (at 1640 mm)	0.34º × 0.19º (at 1640 mm)	0.22º × 0.16º (at 2322 mm)	0.24º × 0.13º (at 2322 mm)
Minimum Object Distance (M.O.D.)			3.0 m (from lens vertex)			
Object Dimensions at M.O.D.	Wide	1.0x	274.1 × 205.6 cm (at 8.6 mm)	298.1 × 167.7 cm (at 8.6 mm)	181.7 × 136.3 cm (at 13.5 mm)	198.2 × 111.5 cm (at 13.5 mm)
		2.0x	137.1 × 102.8 cm (at 17.2 mm)	149.1 × 83.9 cm (at 17.2 mm)	90.9 × 68.2 cm (at 27 mm)	99.1 × 55.7 cm (at 27 mm)
	Tele	1.0x	3.0 × 2.3 cm (at 820 mm)	3.2 × 1.8 cm (at 820 mm)	2.1 × 1.6 cm (at 1161 mm)	2.3 × 1.3 cm (at 1161 mm)
		2.0x	1.5 × 1.2 cm (at 1640 mm)	1.6 × 0.9 cm (at 1640 mm)	1.1 × 0.8 cm (at 2322 mm)	1.2 × 0.7 cm (at 2322 mm)
Zoom Speed			0.6 ± 0.1s Max.			
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.15s		0.8 ± 0.1s	
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

5 SPECIFICATIONS

			XJ86x9.3B AF		**XJ86x9.3B**	
			4:3 mode	**16:9 mode**	**4:3 mode**	**16:9 mode**
Focal Length		1.0x	9.3–800 mm			
		2.0x	18.6–1600 mm			
Zoom Ratio			86×			
Maximum Relative Aperture		1.0x	1:1.7 (at 9.3–340 mm) 1:4.0 (at 800 mm)			
		2.0x	1:3.4 (at 18.6–680 mm) 1:8.0 (at 1600 mm)			
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	50.6º × 39.1º (at 9.3 mm)	54.6º × 32.4º (at 9.3 mm)	50.6º × 39.1º (at 9.3 mm)	54.6º × 32.4º (at 9.3 mm)
		2.0x	26.6º × 20.1º (at 18.6 mm)	28.9º × 16.5º (at 18.6 mm)	26.6º × 20.1º (at 18.6 mm)	28.9º × 16.5º (at 18.6 mm)
	Tele	1.0x	0.63º × 0.47º (at 800 mm)	0.69º × 0.39º (at 800 mm)	0.63º × 0.47º (at 800 mm)	0.69º × 0.39º (at 800 mm)
		2.0x	0.32º × 0.24º (at 1600 mm)	0.34º × 0.19º (at 1600 mm)	0.32º × 0.24º (at 1600 mm)	0.34º × 0.19º (at 1600 mm)
Minimum Object Distance (M.O.D.)			3.0 m (from lens vertex)			
Object Dimensions at M.O.D.	Wide	1.0x	253.9 × 190.4 cm (at 9.3 mm)	276.4 × 155.5 cm (at 9.3 mm)	253.9 × 190.4 cm (at 9.3 mm)	276.4 × 155.5 cm (at 9.3 mm)
		2.0x	127.0 × 95.2 cm (at 18.6 mm)	138.2 × 77.8 cm (at 18.6 mm)	127.0 × 95.2 cm (at 18.6 mm)	138.2 × 77.8 cm (at 18.6 mm)
	Tele	1.0x	3.0 × 2.2 cm (at 800 mm)	3.2 × 1.8 cm (at 800 mm)	3.0 × 2.2 cm (at 800 mm)	3.2 × 1.8 cm (at 800 mm)
		2.0x	1.5 × 1.1 cm (at 1600 mm)	1.6 × 0.9 cm (at 1600 mm)	1.5 × 1.1 cm (at 1600 mm)	1.6 × 0.9 cm (at 1600 mm)
Zoom Speed			0.6 ± 0.1s Max.			
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.15s		0.8 ± 0.1s	
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

			XJ80x8.8B		XJ76x9B	
			4:3 mode	16:9 mode	4:3 mode	16:9 mode
Focal Length		1.0x	8.8–710 mm		9–690 mm	
		2.0x	17.6–1420 mm		18–1380 mm	
Zoom Ratio			80×		76×	
Maximum Relative Aperture		1.0x	1:1.7 (at 8.8–340 mm) 1:3.55 (at 710 mm)		1:1.7 (at 9–340 mm) 1:3.45 (at 690 mm)	
		2.0x	1:3.4 (at 17.6–680 mm) 1:7.1 (at 1420 mm)		1:3.4 (at 18–680 mm) 1:6.9 (at 1380 mm)	
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	53.1° × 41.1° (at 8.8 mm)	57.2° × 34.1° (at 8.8 mm)	52.1° × 40.3° (at 9 mm)	56.1° × 33.4° (at 9 mm)
		2.0x	28.1° × 21.2° (at 17.6 mm)	30.5° × 17.4° (at 17.6 mm)	27.5° × 20.8° (at 18 mm)	29.9° × 17.1° (at 18 mm)
	Tele	1.0x	0.71° × 0.53° (at 710 mm)	0.77° × 0.44° (at 710 mm)	0.73° × 0.55° (at 690 mm)	0.80° × 0.45° (at 690 mm)
		2.0x	0.36° × 0.27° (at 1420 mm)	0.39° × 0.22° (at 1420 mm)	0.37° × 0.27° (at 1380 mm)	0.40° × 0.22° (at 1380 mm)
Minimum Object Distance (M.O.D.)			3 m (from lens vertex)			
Object Dimensions at M.O.D.	Wide	1.0x	266.8 × 200.1 cm (at 8.8 mm)	290.0 × 163.1 cm (at 8.8 mm)	259.9 × 194.9 cm (at 9 mm)	282.4 × 158.9 cm (at 9 mm)
		2.0x	133.4 × 100.1 cm (at 17.6 mm)	145.0 × 81.6 cm (at 17.6 mm)	130.0 × 97.5 cm (at 18 mm)	141.2 × 79.5 cm (at 18 mm)
	Tele	1.0x	3.4 × 2.6 cm (at 710 mm)	3.7 × 2.1 cm (at 710 mm)	3.5 × 2.6 cm (at 690 mm)	3.8 × 2.1 cm (at 690 mm)
		2.0x	1.7 × 1.3 cm (at 1420 mm)	1.9 × 1.1 cm (at 1420 mm)	1.8 × 1.3 cm (at 1380 mm)	1.9 × 1.1 cm (at 1380 mm)
Zoom Speed			0.6 ± 0.1s Max.			
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.15s			
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

			XJ75x9.3B		XJ72x9.3B	
			4:3 mode	16:9 mode	4:3 mode	16:9 mode
Focal Length		1.0x	9.3–700 mm		9.3–675 mm	
		2.0x	18.6–1400 mm		18.6–1350 mm	
Zoom Ratio			75×		72×	
Maximum Relative Aperture		1.0x	1:1.7 (at 9.3–331 mm) 1:3.6 (at 700 mm)		1:1.7 (at 9.3–333 mm) 1:3.45 (at 675 mm)	
		2.0x	1:3.4 (at 18.6–662 mm) 1:7.2 (at 1400 mm)		1:3.4 (at 18.6–666 mm) 1:6.9 (at 1350 mm)	
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	50.6° × 39.1° (at 9.3 mm)	54.6° × 32.4° (at 9.3 mm)	50.6° × 39.1° (at 9.3 mm)	54.6° × 32.4° (at 9.3 mm)
		2.0x	26.6° × 20.1° (at 18.6 mm)	28.9° × 16.5° (at 18.6 mm)	26.6° × 20.1° (at 18.6 mm)	28.9° × 16.5° (at 18.6 mm)
	Tele	1.0x	0.72° × 0.54° (at 700 mm)	0.79° × 0.44° (at 700 mm)	0.75° × 0.56° (at 675 mm)	0.81° × 0.46° (at 675 mm)
		2.0x	0.36° × 0.27° (at 1400 mm)	0.39° × 0.22° (at 1400 mm)	0.37° × 0.28° (at 1350 mm)	0.41° × 0.23° (at 1350 mm)
Minimum Object Distance (M.O.D.)			2.8 m (from lens vertex)			
Object Dimensions at M.O.D.	Wide	1.0x	234.3 × 175.7 cm (at 9.3 mm)	255.6 × 143.8 cm (at 9.3 mm)	234.3 × 175.7 cm (at 9.3 mm)	255.6 × 143.8 cm (at 9.3 mm)
		2.0x	117.2 × 87.9 cm (at 18.6 mm)	127.9 × 71.9 cm (at 18.6 mm)	117.2 × 87.9 cm (at 18.6 mm)	127.9 × 71.9 cm (at 18.6 mm)
	Tele	1.0x	3.2 × 2.4 cm (at 700 mm)	3.4 × 1.9 cm (at 700 mm)	3.3 × 2.5 cm (at 675 mm)	3.6 × 2.0 cm (at 675 mm)
		2.0x	1.6 × 1.2 cm (at 1400 mm)	1.8 × 1.0 cm (at 1400 mm)	1.7 × 1.3 cm (at 1350 mm)	1.8 × 1.0 cm (at 1350 mm)
Zoom Speed			0.6 ± 0.1s Max.			
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.1s			
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

			XJ60x9B		**XJ27x6.5B AF**	
			4:3 mode	**16:9 mode**	**4:3 mode**	**16:9 mode**
Focal Length		1.0x	9–540 mm		6.5–180 mm	
		2.0x	18–1080 mm		13–360 mm	
Zoom Ratio			60×		27×	
Maximum Relative Aperture		1.0x	1:1.7 (at 9–306 mm) 1:3.0 (at 540 mm)		1:1.5 (at 6.5–123 mm) 1:2.2 (at 180 mm)	
		2.0x	1:3.4 (at 18–612 mm) 1:6.0 (at 1080 mm)		1:3.0 (at 13–246 mm) 1:4.4 (at 360 mm)	
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	52.1º × 40.3º (at 9 mm)	56.1º × 33.4º (at 9 mm)	68.2º × 53.8º (at 6.5 mm)	72.9º × 45.1º (at 6.5 mm)
		2.0x	27.5º × 20.8º (at 18 mm)	29.9º × 17.1º (at 18 mm)	37.4º × 28.5º (at 13 mm)	40.5º × 23.5º (at 13 mm)
	Tele	1.0x	0.93º × 0.70º (at 540 mm)	1.02º × 0.57º (at 540 mm)	2.8º × 2.1º (at 180 mm)	3.1º × 1.7º (at 180 mm)
		2.0x	0.47º × 0.35º (at 1080 mm)	0.51º × 0.29º (at 1080 mm)	1.4º × 1.1º (at 360 mm)	1.5º × 0.9º (at 360 mm)
Minimum Object Distance (M.O.D.)			2.8 m (from lens vertex)		0.6 m (from lens vertex)	
Object Dimensions at M.O.D.	Wide	1.0x	243.8 × 182.9 cm (at 9 mm)	265.1 × 149.1 cm (at 9 mm)	97.0 × 72.8 cm (at 6.5 mm)	106.1 × 59.7 cm (at 6.5 mm)
		2.0x	121.9 × 91.5 cm (at 18 mm)	132.6 × 74.6 cm (at 18 mm)	48.5 × 36.4 cm (at 13 mm)	53.1 × 29.9 cm (at 13 mm)
	Tele	1.0x	4.1 × 3.1 cm (at 540 mm)	4.5 × 2.5 cm (at 540 mm)	3.5 × 2.6 cm (at 180 mm)	3.8 × 2.1 cm (at 180 mm)
		2.0x	2.1 × 1.6 cm (at 1080 mm)	2.3 × 1.3 cm (at 1080 mm)	1.8 × 1.3 cm (at 360 mm)	1.9 × 1.1 cm (at 360 mm)
Zoom Speed			0.6 ± 0.1s Max.		0.5 ± 0.1s Max.	
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.15s			
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

			XJ27x6.5B		**XJ23x7B**	
			4:3 mode	**16:9 mode**	**4:3 mode**	**16:9 mode**
Focal Length		1.0x	6.5–180 mm		7–161 mm	
		2.0x	13–360 mm		14–322 mm	
Zoom Ratio			27×		23×	
Maximum Relative Aperture		1.0x	1:1.5 (at 6.5–123 mm) 1:2.2 (at 180 mm)		1:1.6 (at 7–132.1 mm) 1:1.95 (at 161 mm)	
		2.0x	1:3.0 (at 13–246 mm) 1:4.4 (at 360 mm)		1:3.2 (at 14–264.2 mm) 1:3.9 (at 322 mm)	
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	68.2º × 53.8º (at 6.5 mm)	72.9º × 45.1º (at 6.5 mm)	64.3º × 50.5º (at 7 mm)	68.8º × 42.1º (at 7 mm)
		2.0x	37.4º × 28.5º (at 13 mm)	40.5º × 23.5º (at 13 mm)	34.9º × 26.5º (at 14 mm)	37.8º × 21.8º (at 14 mm)
	Tele	1.0x	2.8º × 2.1º (at 180 mm)	3.1º × 1.7º (at 180 mm)	3.1º × 2.3º (at 161 mm)	3.4º × 1.9º (at 161 mm)
		2.0x	1.4º × 1.1º (at 360 mm)	1.5º × 0.9º (at 360 mm)	1.6º × 1.2º (at 322 mm)	1.7º × 1.0º (at 322 mm)
Minimum Object Distance (M.O.D.)			0.6 m (from lens vertex)			
Object Dimensions at M.O.D.	Wide	1.0x	97.0 × 72.8 cm (at 6.5 mm)	106.1 × 59.7 cm (at 6.5 mm)	90.6 × 68.0 cm (at 7 mm)	99.0 × 55.7 cm (at 7 mm)
		2.0x	48.5 × 36.4 cm (at 13 mm)	53.1 × 29.9 cm (at 13 mm)	45.3 × 34.0 cm (at 14 mm)	49.5 × 27.9 cm (at 14 mm)
	Tele	1.0x	3.5 × 2.6 cm (at 180 mm)	3.8 × 2.1 cm (at 180 mm)	3.8 × 2.9 cm (at 161 mm)	4.2 × 2.4 cm (at 161 mm)
		2.0x	1.8 × 1.3 cm (at 360 mm)	1.9 × 1.1 cm (at 360 mm)	1.9 × 1.5 cm (at 322 mm)	2.1 × 1.2 cm (at 322 mm)
Zoom Speed			0.5 ± 0.1s Max.		0.6 ± 0.1s Max.	
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.15s			
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

IDSD

			XJ95x8.6B		XJ27x6.5B	
			4:3 mode	16:9 mode	4:3 mode	16:9 mode
Focal Length		1.0x	8.6–820 mm		6.5–180 mm	
		2.0x	17.2–1640 mm		13–360 mm	
Zoom Ratio			95×		27×	
Maximum Relative Aperture		1.0x	1:1.7 (at 8.6–340 mm) 1:4.1 (at 820 mm)		1:1.5 (at 6.5–123 mm) 1:2.2 (at 180 mm)	
		2.0x	1:3.4 (at 17.2–680 mm) 1:8.2 (at 1640 mm)		1:3.0 (at 13–246 mm) 1:4.4 (at 360 mm)	
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1.0x	54.2° × 42.0° (at 8.6 mm)	58.3° × 34.9° (at 8.6 mm)	68.2° × 53.8° (at 6.5 mm)	72.9° × 45.1° (at 6.5 mm)
		2.0x	28.7° × 21.7° (at 17.2 mm)	31.2° × 17.8° (at 17.2 mm)	37.4° × 28.5° (at 13 mm)	40.5° × 23.5° (at 13 mm)
	Tele	1.0x	0.61° × 0.46° (at 820 mm)	0.67° × 0.38° (at 820 mm)	2.8° × 2.1° (at 180 mm)	3.1° × 1.7° (at 180 mm)
		2.0x	0.31° × 0.23° (at 1640 mm)	0.34° × 0.19° (at 1640 mm)	1.4° × 1.1° (at 360 mm)	1.5° × 0.9° (at 360 mm)
Minimum Object Distance (M.O.D.)			3.0 m (from lens vertex)		0.6 m (from lens vertex)	
Object Dimensions at M.O.D.	Wide	1.0x	274.1 × 205.6 cm (at 8.6 mm)	298.1 × 167.7 cm (at 8.6 mm)	97.0 × 72.8 cm (at 6.5 mm)	106.1 × 59.7 cm (at 6.5 mm)
		2.0x	137.1 × 102.8 cm (at 17.2 mm)	149.1 × 83.9 cm (at 17.2 mm)	48.5 × 36.4 cm (at 13 mm)	53.1 × 29.9 cm (at 13 mm)
	Tele	1.0x	3.0 × 2.3 cm (at 820 mm)	3.2 × 1.8 cm (at 820 mm)	3.5 × 2.6 cm (at 180 mm)	3.8 × 2.1 cm (at 180 mm)
		2.0x	1.5 × 1.2 cm (at 1640 mm)	1.6 × 0.9 cm (at 1640 mm)	1.8 × 1.3 cm (at 360 mm)	1.9 × 1.1 cm (at 360 mm)
Zoom Speed			0.35 ± 0.1s Max. (dedicated 100V AC power supply or 19V DC input) 0.6 ± 0.1s Max. (servo control by demand operation)		0.3 ± 0.1s Max. (press-pull operation with dedicated 100V AC power supply or 19V DC input) 0.5 ±0.1s Max. (servo control by demand operation)	
Focus Speed			0.8 ± 0.1s Max.			
Iris Speed			0.8 ± 0.15s			
Mount			B4			
Input Voltage			DC12V (DC10V to 17V) (power supply input from camera) 100V AC, 0.5A (dedicated power supply) or 19V DC (12V to 19V DC) (dedicated power supply)			
Power Consumption			24W Max. (power supply input from camera) 50W Max. (dedicated power supply)			
Operating Temperature			-20°C to +45°C			
Dimensions			See attached drawing.			
Flange back			See attached drawing.			

Canon

ディスプレイ操作マニュアル

DISPLAY OPERATION MANUAL

显示屏操作手册

ディスプレイ搭載機種をご使用の方は、
こちらもあわせてご覧ください。

Users of models equipped with an information display should also refer to this manual.

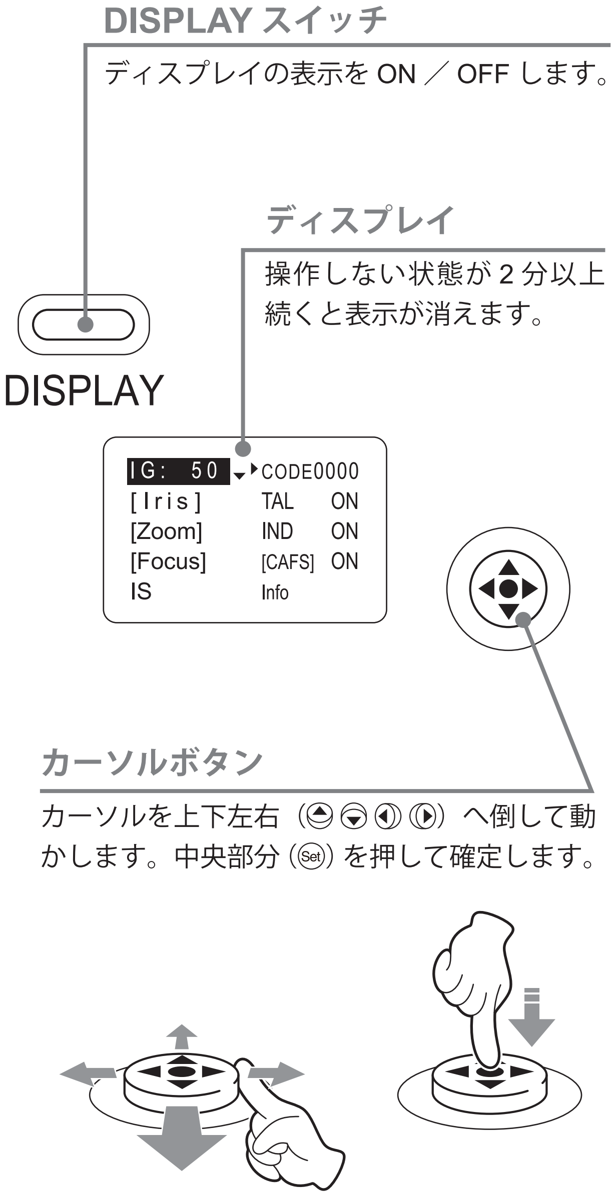
使用设有显示屏的机型的用户，
还请参阅本手册。

DIGISUPER

基本操作 1
リセット操作 1
ディスプレイメニュー階層 2
TOP 画面及び各種画面 3
操作例（初期化動作設定） 4
オートアイリスゲインの設定 4
レンズコードの設定 4
オートアイリスゲインの設定 Auto 5
リモートアイリスゲインの設定 Remote 5
アイリス補正 ON ／ OFF 5
アイリスクローズ検出 ON ／ OFF 6
タリー点灯／消灯 6
ズームサーボの立上がり特性 Start 6
ズームサーボの止まり際特性 Stop 6
メカ端部止まり特性 End 6
各プリセットのズーム立上がり特性 Start 7
各プリセットのズーム止まり際特性 Stop 7
アナログデマンドカーブ特性 7
CAM モード設定 8
ズームデマンドからのサーボモード設定 8
インジケーターの点灯／消灯 8
フォーカスデマンドのカーブ特性 9
CAFS の設定 9
IS メカロック設定 10
IS 操作スイッチ設定 10
IS モード設定 10
タリー光量の設定 11
エンコーダー出力設定 11
カメラシリアル通信の有効／無効 11
カメラフォロー電圧調整 Iris Zoom Focus 12

Basic operation E1
Reset operation E1
Display menu hierarchy E2
TOP screen and various screens E3
Operation example (initialize operation setting) E4
Setting the auto iris gain E4
Lens code setting E4
Setting the auto iris gain Auto E5
Setting the remote iris gain Remote E5
Setting the iris correction to ON/OFF E5
Setting the iris close detection to ON/OFF E6
Setting the tally lamp ON/OFF E6
Setting the zoom servo start characteristics Start E6
Setting the zoom servo stop characteristics Stop E6
Setting the zoom mechanism end stop characteristics End E6
Setting the zoom start characteristics for preset operations Start E7
Setting the zoom stop characteristics for preset operations Stop E7
Setting the analog demand curve characteristics E7
CAM mode settings E8
Setting the servo mode type from the zoom demand E8
Setting the indicator ON/OFF E8
Focus demand curve characteristics E9
CAFS setting E9
IS mechanical lock setting E10
IS operation switch setting E10
IS mode setting E10
Tally lamp light quantity setting E11
Encoder output setting E11
Setting the camera serial communication to ON/OFF E11
Adjusting the Camera Fol Voltage Iris Zoom Focus E12

基本操作 C1
复位操作 C1
显示屏菜单层次结构 C2
TOP 画面以及各种画面 C3
操作举例（初始化操作设定） C4
自动光圈增益的设定 C4
镜头代码设定 C4
自动光圈增益的设定 Auto C5
遥控光圈增益的设定 Remote C5
光圈补偿的 ON/OFF 设定 C5
光圈关闭检测的 ON/OFF 设定 C6
播放指示灯的亮灯 / 熄灯设定 C6
变焦伺服启动特性的设定 Start C6
变焦伺服停止特性的设定 Stop C6
变焦机构端部停止特性的设定 End C6
各项预设变焦启动特性的设定 Start C7
各项预设变焦停止特性的设定 Stop C7
模拟电动控制器曲线特性的设定 C7
CAM 模式设定 C8
利用变焦电动控制器设定伺服模式类型 C8
指示灯的亮灯 / 熄灯设定 C8
聚焦电动控制器曲线特性 C9
CAFS 设定 C9
图像稳定（IS）机械锁定设定 C10
图像稳定（IS）操作开关设定 C10
图像稳定（IS）模式设定 C10
播放指示灯光量设定 C11
编码器输出设定 C11
摄像机串行通信的无效 / 有效设定 C11
摄像机跟随电压调整 Iris Zoom Focus C12


DISPLAY
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

DISPLAY スイッチ

ディスプレイの表示を ON ／ OFF します。

ディスプレイ

操作しない状態が 2 分以上続くと表示が消えます。

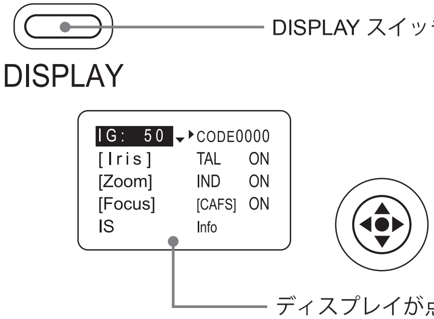
カーソルボタン

カーソルを上下左右（⊕⊖◐◑）へ倒して動かします。中央部分（Set）を押して確定します。

基本操作

1 レンズの電源を入れます。

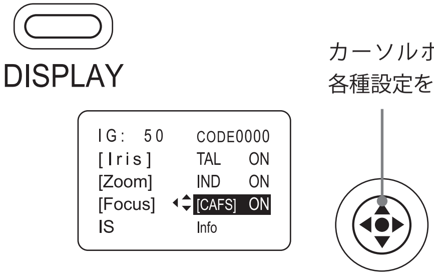
2


DISPLAY
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

DISPLAY スイッチを押します。

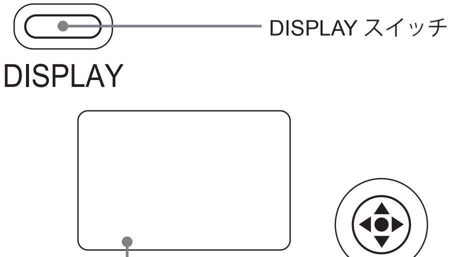
ディスプレイが点灯します。

3


DISPLAY
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

カーソルボタンを使用し、各種設定を行います。

4

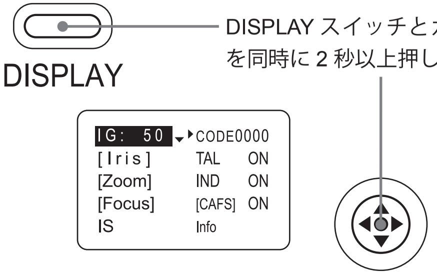


DISPLAY スイッチを押します。

ディスプレイが消灯し、変更内容が保存されます。

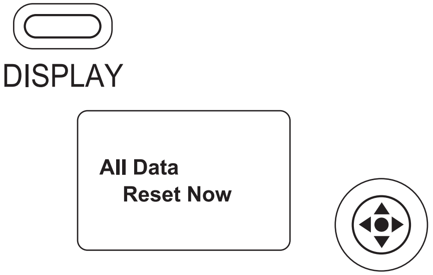
リセット操作

1


DISPLAY
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

DISPLAY スイッチとカーソルボタンを同時に 2 秒以上押し続けます。

2

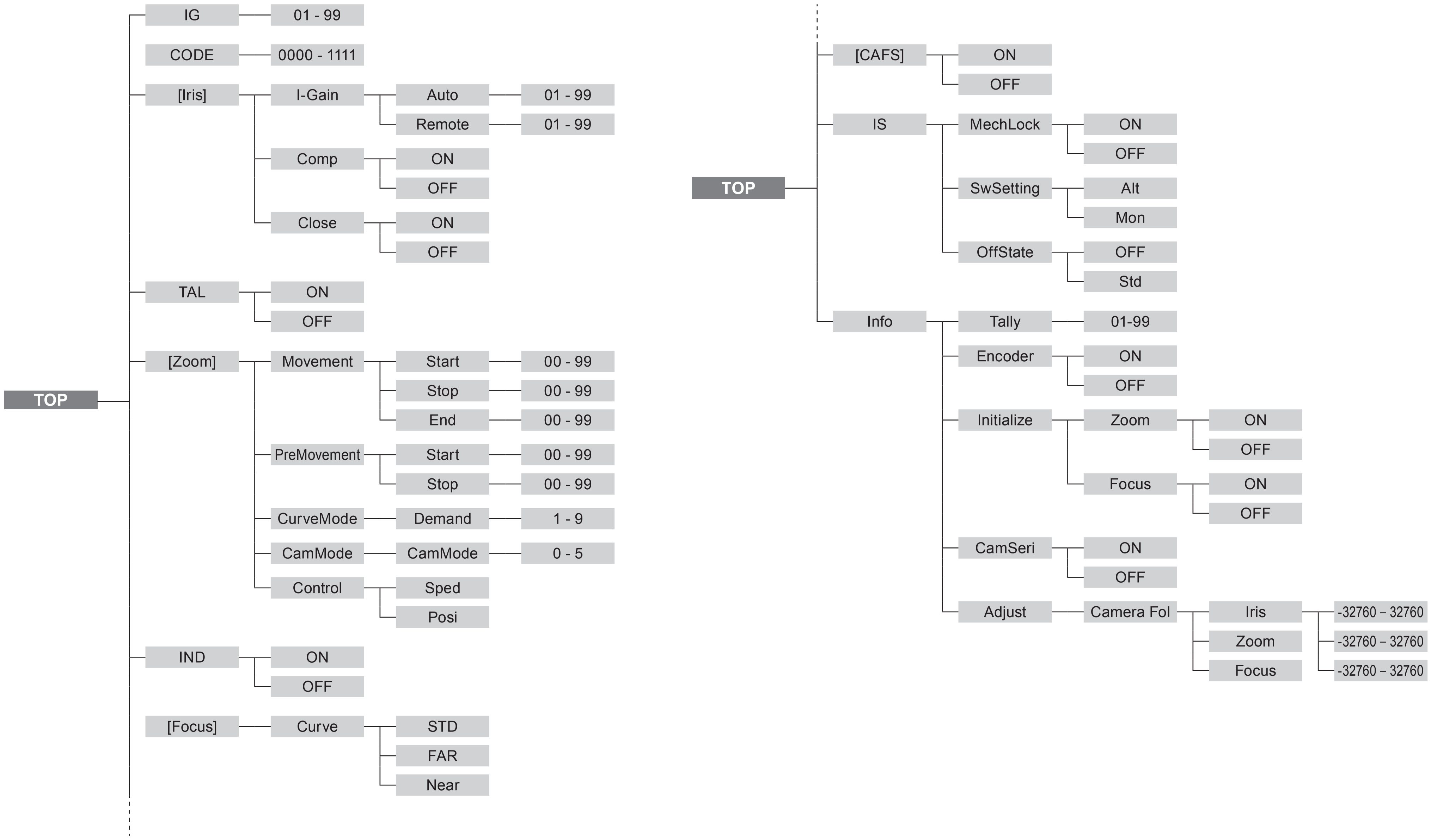

DISPLAY
All Data
Reset Now

下記表のデータがリセットされ、デフォルト値に戻ります。

項目	デフォルト値
CAFS の設定	ON
タリー点灯設定	ON
インジケーターの点灯設定	ON
アイリス補正の ON ／ OFF 切替え	ON
アイリスクローズ検出の ON ／ OFF 切替え	出荷時設定値
ズームサーボの立上がり特性の設定	50
ズームサーボの止まり際特性の設定	50
ズームメカ端部止まり際特性の設定	91
各プリセットのズーム立上がり特性の設定	99
各プリセットのズーム止まり際特性の設定	91
アナログデマンドカーブ特性の設定	5*
ズームデマンドからのサーボモード設定	Sped
CAM モード設定	0
フォーカスデマンドのカーブ特性	STD
タリー光量の設定	出荷時設定値

* XJ60x のみ "3"。

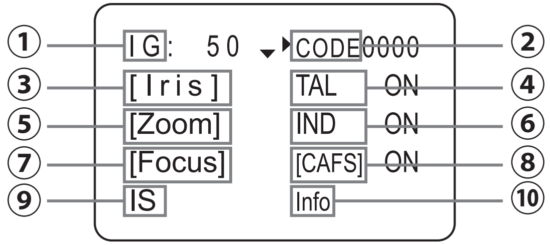
ディスプレイメニュー階層


TOP
IG
01 - 99
CODE
0000 - 1111
[Iris]
I-Gain
Auto
01 - 99
Remote
01 - 99
Comp
ON
OFF
Close
ON
OFF
TAL
ON
OFF
[Zoom]
Movement
Start
00 - 99
Stop
00 - 99
End
00 - 99
PreMovement
Start
00 - 99
Stop
00 - 99
CurveMode
Demand
1 - 9
CamMode
CamMode
0 - 5
Control
Sped
Posi
IND
ON
OFF
[Focus]
Curve
STD
FAR
Near
TOP
[CAFS]
ON
OFF
IS
MechLock
ON
OFF
SwSetting
Alt
Mon
OffState
OFF
Std
Info
Tally
01-99
Encoder
ON
OFF
Initialize
Zoom
ON
OFF
Focus
ON
OFF
CamSeri
ON
OFF
Adjust
Camera Fol
Iris
-32760 – 32760
Zoom
-32760 – 32760
Focus
-32760 – 32760

TOP 画面及び各種画面

DISPLAY スイッチを押したときに最初に表示される画面が TOP 画面です。各種設定や設定状況の確認を行うことができます。

TOP 画面

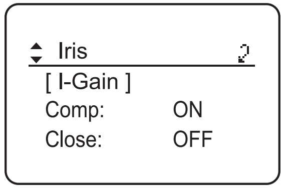


IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info

① IG
オートアイリスゲインの調整

② CODE
レンズコードの設定

③ [Iris]
アイリス制御に関する設定

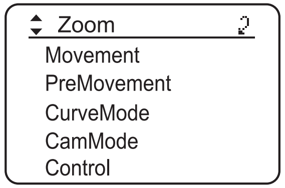


```
Iris
 [ I-Gain ]
 Comp:      ON
 Close:     OFF
```

[I-Gain]：アイリスゲインの設定（オート／リモート）
Comp： アイリス補正の ON ／ OFF
Close： クローズ検出の ON ／ OFF

④ TAL
タリーの点灯／消灯設定

⑤ [Zoom]
ズーム制御に関する設定

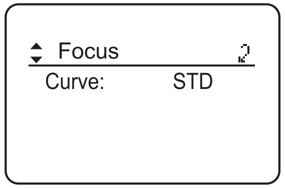


```
Zoom
 Movement
 PreMovement
 CurveMode
 CamMode
 Control
```

Movement：	サーボの立上がり／止まり際、メカ端部止まり際特性
PreMovement：	各プリセットのズーム立上がり特性
CurveMode：	アナログデマンドカーブ特性
CamMode：	CAM モードの設定
Control：	デマンドからのサーボモード設定

⑥ IND
インジケーターの点灯／消灯設定

⑦ [Focus]
フォーカス制御に関する設定

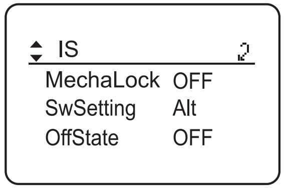


```
Focus
 Curve:      STD
```

Curve：デマンドのカーブ特性

⑧ [CAFS]
CAFS 機能の ON ／ OFF 設定

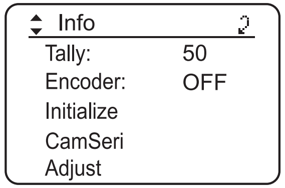
⑨ IS
IS 機能に関する設定



```
IS
 MechaLock  OFF
 SwSetting  Alt
 OffState   OFF
```

MechaLock：	メカロック設定
SwSetting：	操作スイッチ設定
OffState：	モード設定

⑩ Info
その他各種設定

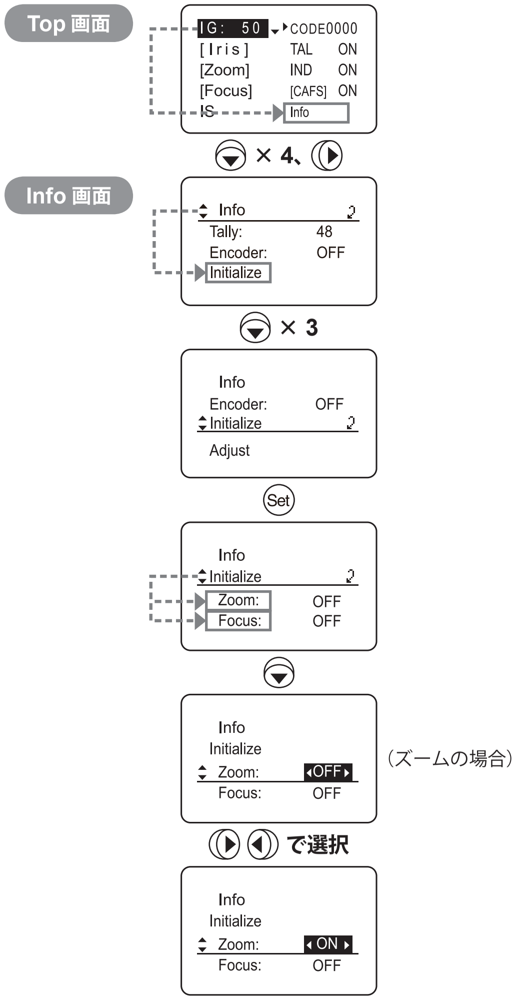


```
Info
 Tally:       50
 Encoder:     OFF
 Initialize
 CamSeri
 Adjust
```

Tally：	タリー光量の設定
Encoder：	エンコーダー出力設定
Initialize：	初期化動作設定
CamSeri：	カメラシリアル通信の有効／無効
Adjust：	カメラフォロー電圧調整

操作例（初期化動作設定）

ズームとフォーカスの初期化動作を電源投入時に行うか行わないかを設定します。


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4、
Info 画面
Info
Tally: 48
Encoder: OFF
Initialize
× 3
Info
Encoder: OFF
Initialize
Adjust
Set
Info
Initialize
Zoom: OFF
Focus: OFF
Info
Initialize
Zoom: OFF
Focus: OFF
（ズームの場合）
で選択
Info
Initialize
Zoom: ON
Focus: OFF

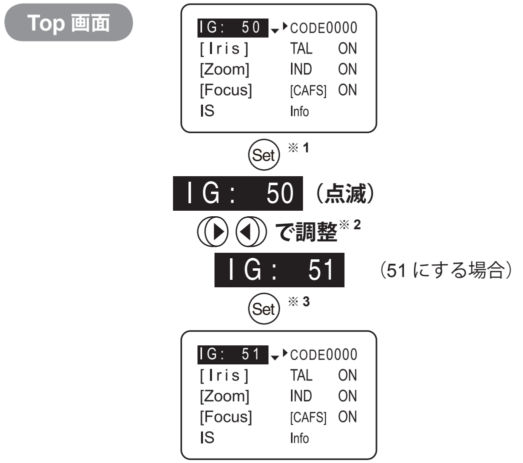
電源を入れ直してください

選択項目	(D) OFF	ON
機能	初期化動作なし	初期化動作あり

(D)：デフォルト値

IG

オートアイリスゲインの設定


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
Set ※1
IG: 50（点滅）
で調整※2
IG: 51
（51 にする場合）
Set ※3
IG: 51 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info

※（注 1）：アイリスの動作を確認しながらゲイン調整を行う際は、カメラのアイリスモードを［AUTO］にします。

※（注 2）：ハンチングがおこらない範囲でゲインが最高になるよう設定してください。

※（注 3）：アイリスゲインの設定値は、1 ページに記載してあります「リセット操作」を行ってもリセットされません。

トリマーによる設定については、取扱説明書 10 ページ "2-4 アイリスゲイン調整 " をご参照ください。

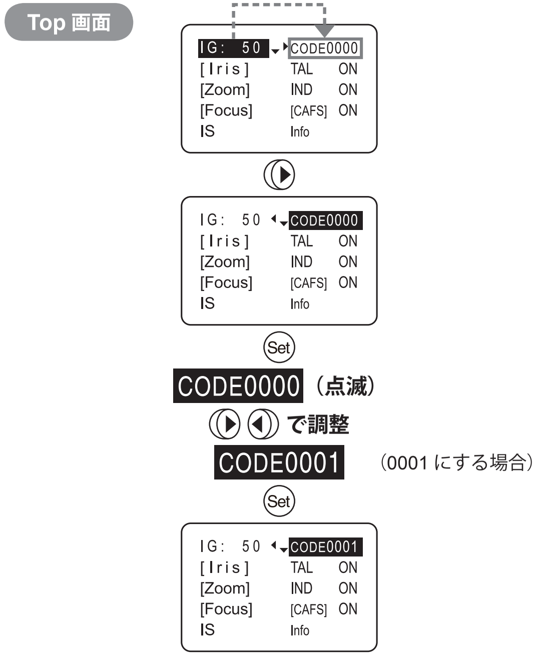
選択項目	01	～	99
機能	ゲイン最小		ゲイン最大

デフォルト値：50

CODE

レンズコードの設定

レンズに番号を付け、カメラ側に送り返す事ができます。0000 から 1111 の 2 進数で 16 通りから選択できます。
カメラ機能によりますが、カメラ側でレンズの識別に使用する場合があります。
カメラメーカーからの指示があった場合に設定します。


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
IG: 50 CODE0000
Set
CODE0000（点滅）
で調整
CODE0001
（0001 にする場合）
Set
IG: 50 CODE0001
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info

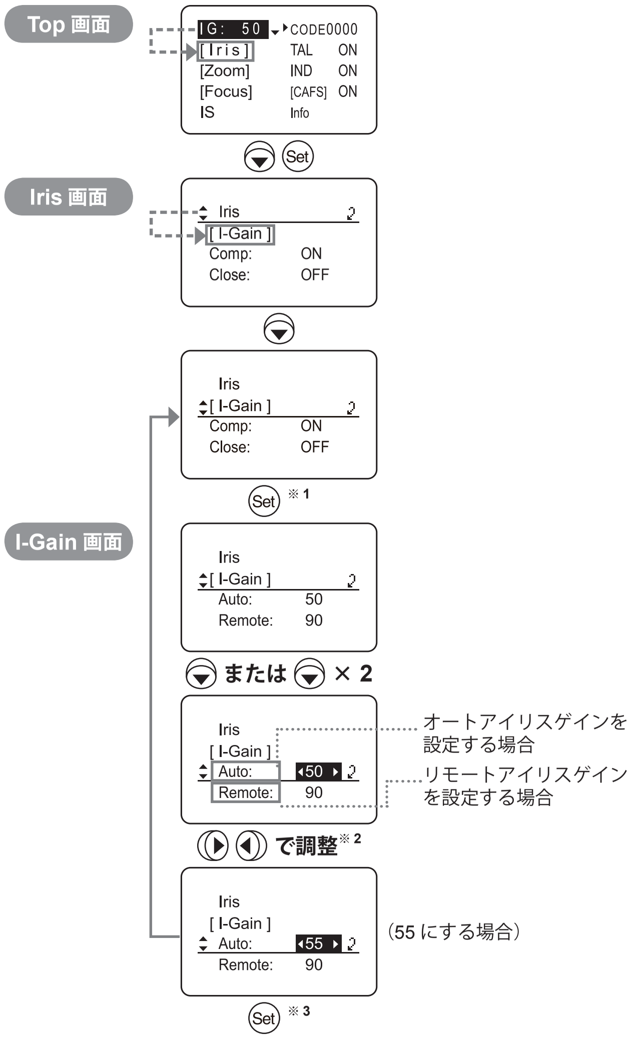
※（注）
- 数値は 2 進数で 16 通り変化します。
- レンズコードはリセット操作を行っても、数値は変わりません。

選択項目	0000	～	1111

デフォルト値：工場出荷時に設定されます。

[Iris] – [I-Gain]

オートアイリスゲインの設定 Auto
リモートアイリスゲインの設定 Remote


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
Iris 画面
Iris
[I-Gain]
Comp: ON
Close: OFF
I-Gain 画面
Set ※1
Auto: 50
Remote: 90
または × 2
オートアイリスゲインを設定する場合
リモートアイリスゲインを設定する場合
で調整※2
(55 にする場合)
Auto: 55
Set ※3

※（注 1）：アイリスの動作を確認しながらゲイン調整を行う際は、カメラのアイリスモードを［AUTO］（オートアイリスゲインを設定する場合）、または［REMOTE］（リモートアイリスゲインを設定する場合）にします。

※（注 2）：ハンチングがおこらない範囲でゲインが最高になるよう設定してください。

※（注 3）：アイリスゲインの設定値は、1 ページに記載してあります。「リセット操作」を行ってもリセットされません。

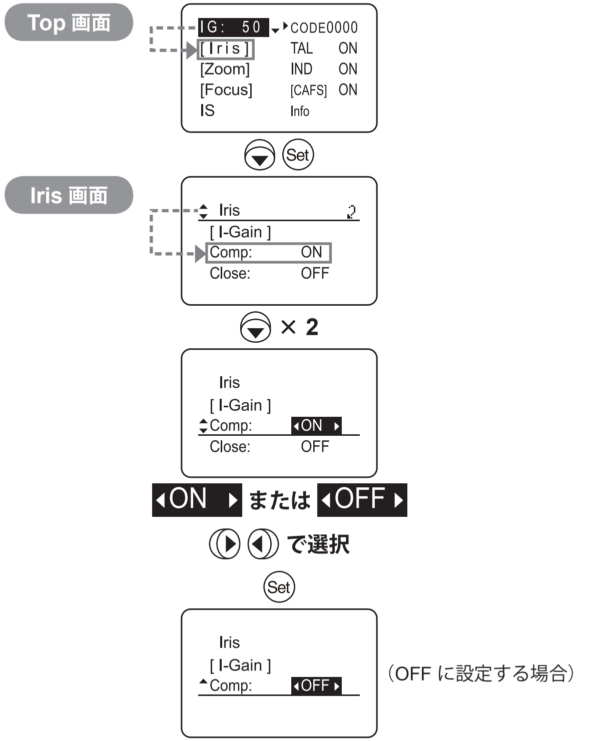
選択項目	01	〜	99
機能	ゲイン最小		ゲイン最大

オートアイリスゲインデフォルト値：50
リモートアイリスゲインデフォルト値：90

[Iris] – Comp

アイリス補正 ON ／ OFF

エクステンダー使用時にアイリスを 2F 相当のオープン側に補正する機能の ON ／ OFF 設定です。


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
Iris 画面
Iris
[I-Gain]
Comp: ON
Close: OFF
× 2
ON または OFF
で選択
Set
Comp: OFF
（OFF に設定する場合）

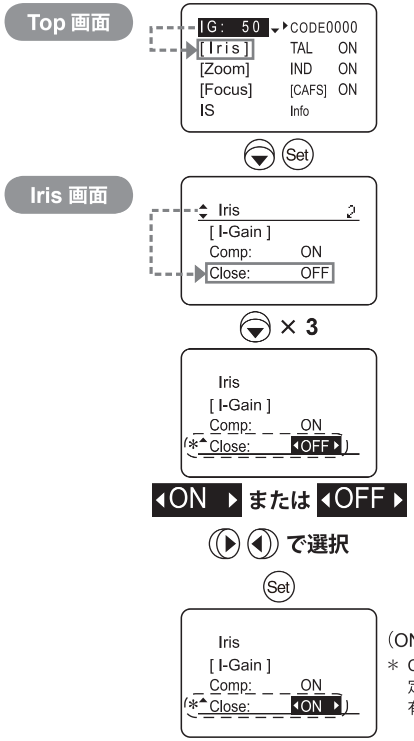
選択項目	(D)ON	OFF
機能	アイリス補正する	アイリス補正しない

(D)：デフォルト値

[Iris] – Close

アイリスクローズ検出 ON ／ OFF

アイリス補正機能が ON になっているときに、エクステンダー（2.0x）を入れるとアイリスをクローズにできない状態になります。その対策としてクローズを検出したときは、クローズさせる機能を設定できます。


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
Set
Iris 画面
Iris
[I-Gain]
Comp: ON
Close: OFF
× 3
Iris
[I-Gain]
Comp: ON
(* Close: OFF)
ON または OFF
で選択
Set
Iris
[I-Gain]
Comp: ON
(* Close: ON)

（ON に設定する場合）

＊ Comp（アイリス補正）が ON 設定時にアイリスクローズ検出が有効になり、表示されます。

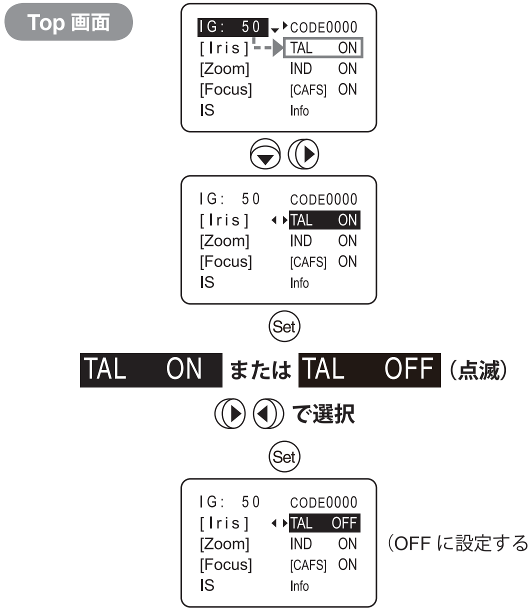
※（注）：カメラにより、レンズのアイリス補正とカメラからのアイリスコントロールとの相互関係でアイリスが正常に動作できない場合があります。そのときはアイリスクローズ検出機能を OFF にしてください。

選択項目	ON	OFF
機能	アイリスクローズ検出する	クローズ検出しない

デフォルト値：工場出荷時にカメラのインターフェースによって設定されます。

TAL

タリー点灯／消灯


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
Set
TAL ON または TAL OFF （点滅）
で選択
Set
IG: 50 CODE0000
[Iris] TAL OFF
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info

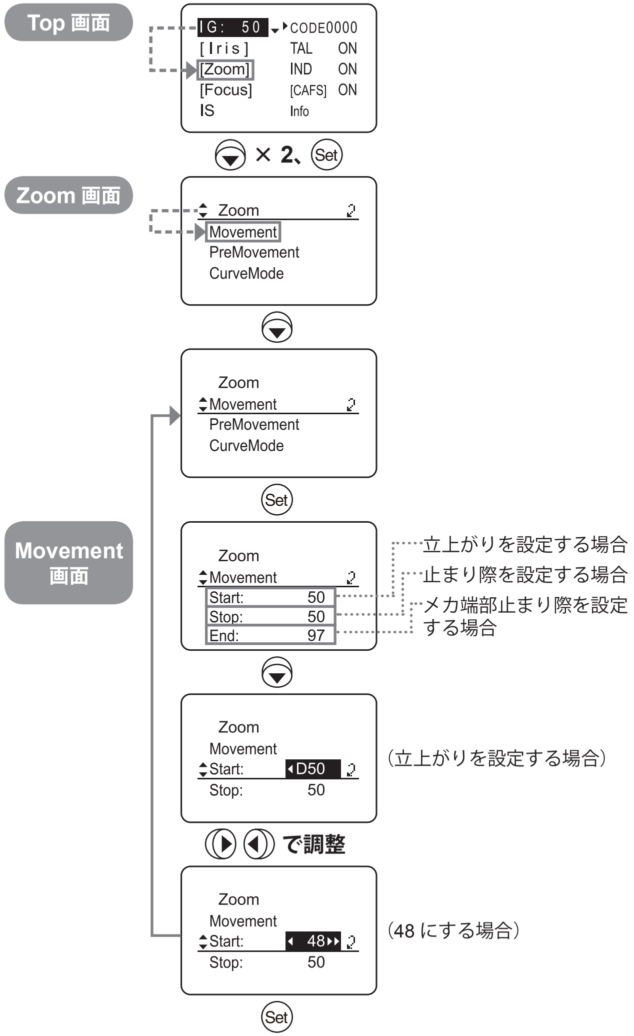
（OFF に設定する場合）

選択項目	(D) ON	OFF
機能	点灯	消灯

(D)：デフォルト値

[Zoom] – Movement

ズームサーボの立上がり特性 Start
ズームサーボの止まり際特性 Stop
メカ端部止まり特性 End


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 2、Set
Zoom 画面
Zoom
Movement
PreMovement
CurveMode
Zoom
Movement
PreMovement
CurveMode
Set
Movement 画面
Zoom
Movement
Start: 50
Stop: 50
End: 97
立上がりを設定する場合
止まり際を設定する場合
メカ端部止まり際を設定する場合
Zoom
Movement
Start: D50
Stop: 50
で調整
Zoom
Movement
Start: 48
Stop: 50
Set

（立上がりを設定する場合）

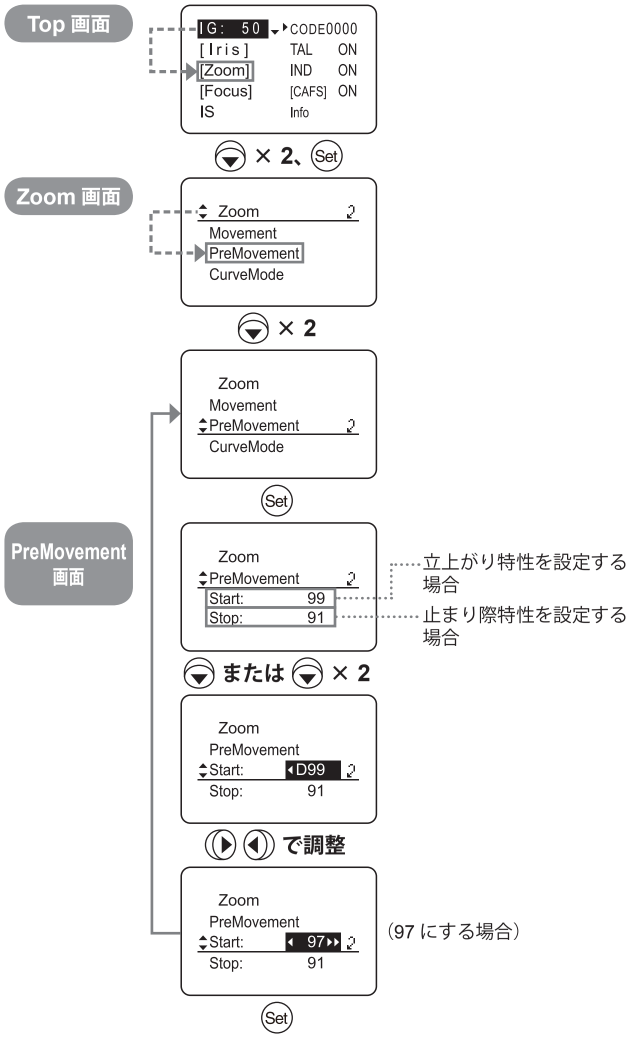
（48 にする場合）

選択項目	00	～	99
機能	ゆっくり立ち上がる		急に立ち上がる

サーボの立上がり特性 デフォルト値：50
サーボの止まり際 デフォルト値：50
メカ端部止まり際 デフォルト値：91

[Zoom] – PreMovement

各プリセットのズーム立上がり特性 Start
各プリセットのズーム止まり際特性 Stop


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 2、Set
Zoom 画面
Zoom
Movement
PreMovement
CurveMode
× 2
PreMovement 画面
Zoom
Movement
PreMovement
CurveMode
Set
Zoom
PreMovement
Start: 99
Stop: 91
立上がり特性を設定する場合
止まり際特性を設定する場合
または × 2
Zoom
PreMovement
Start: D99
Stop: 91
で調整
Zoom
PreMovement
Start: 97
Stop: 91
（97 にする場合）
Set

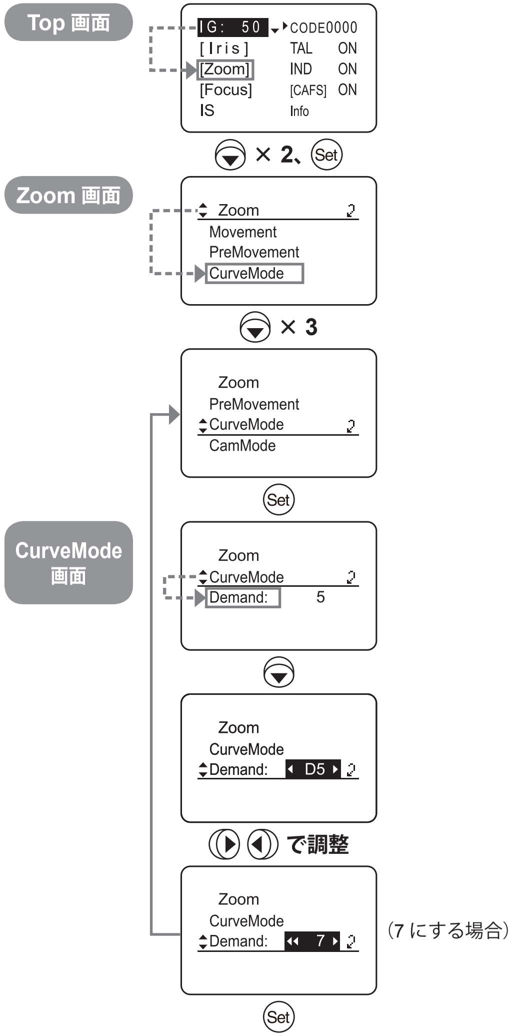
選択項目	00	～	99
機能	ゆっくり立ち上がる		急に立ち上がる

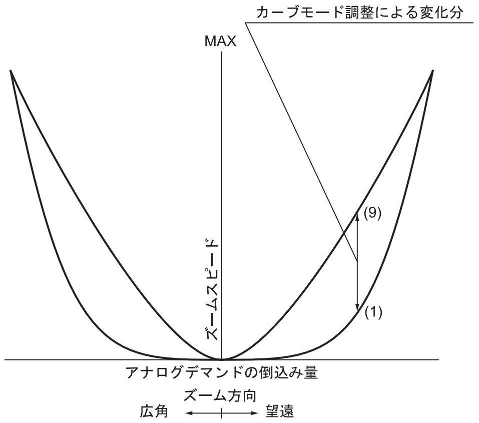
立上がり特性デフォルト値：99
止まり際特性デフォルト値：91

[Zoom] – CurveMode

アナログデマンドカーブ特性

アナログズームデマンドの倒し込み量に対するズームスピードの特性を可変させることができます。


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 2、Set
Zoom 画面
Zoom
Movement
PreMovement
CurveMode
× 3
CurveMode 画面
Zoom
PreMovement
CurveMode
CamMode
Set
Zoom
CurveMode
Demand: 5
Zoom
CurveMode
Demand: D5
で調整
Zoom
CurveMode
Demand: 7
（7 にする場合）
Set



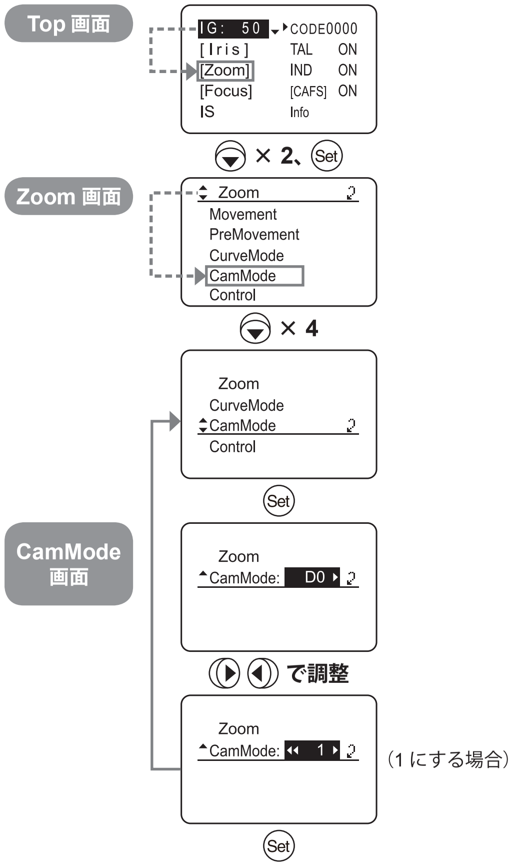
選択項目	1	2	3	4	(D) 5	6	7	8	9

(D)：デフォルト値

[Zoom] – CamMode – Demand

CAM モード設定

ズームコントロールに対して、ズームの画角変化を補正することができます。
0 は補正なし、5 は最大に補正します。


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 2、Set
Zoom 画面
Zoom
Movement
PreMovement
CurveMode
CamMode
Control
× 4
Zoom
CurveMode
CamMode
Control
Set
CamMode 画面
Zoom
CamMode: D0
で調整
Zoom
CamMode: 1
Set

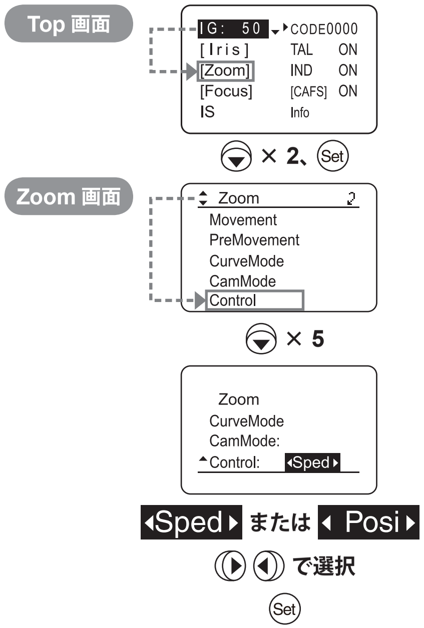
（1 にする場合）

選択項目	(D) 0	～	5
機能	補正なし		補正最大

(D)：デフォルト値

[Zoom] – Control

ズームデマンドからのサーボモード設定（仕様によっては状態表示の確認のみ）

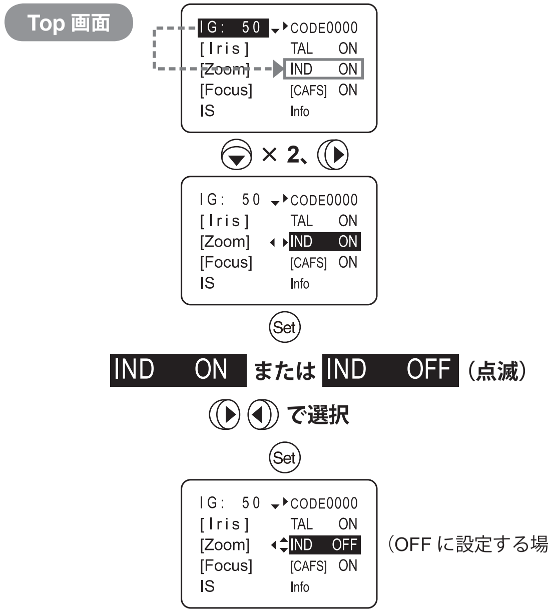

Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 2、Set
Zoom 画面
Zoom
Movement
PreMovement
CurveMode
CamMode
Control
× 5
Zoom
CurveMode
CamMode:
Control: Sped
Sped または Posi
で選択
Set

表示項目	(D) Sped	Posi
機能	スピードサーボ	ポジションサーボ

(D)：デフォルト値

IND

インジケーターの点灯／消灯


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 2、
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
IND ON または IND OFF（点滅）
で選択
Set
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND OFF
[Focus]
[CAFS] ON
IS
Info

（OFF に設定する場合）

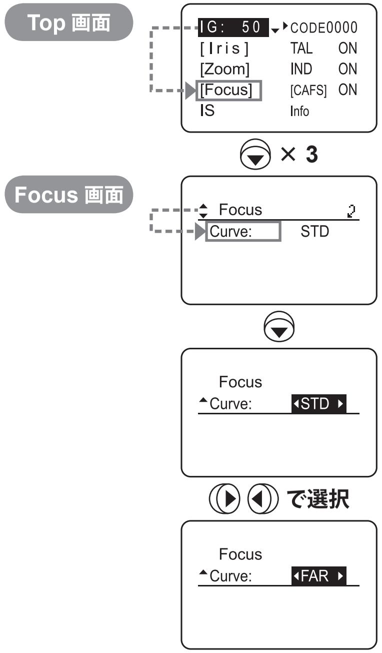
選択項目	(D) ON	OFF
機能	点灯	消灯

(D)：デフォルト値

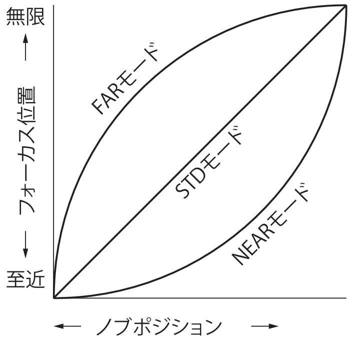
[Focus] – Curve

フォーカスデマンドのカーブ特性

カメラ経由でフォーカスコントロールを行う場合、通常はフォーカス操作のカーブ特性を設定することができます。
（ただし、シリアルデータ制御の場合を除く。）


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 3
Focus 画面
Focus
Curve:
STD
Focus
Curve:
STD
で選択
Focus
Curve:
FAR

（FAR モードに設定する場合）



STD（標準モード）	操作ノブの回転量に対するフォーカスレンズグループの移動量の関係が、ほぼリニアな標準的な特性モード
FAR（Far モード）	遠距離の被写体の焦点合わせがやり易くなるように、無限遠でのカーブの特性を緩やかにして、遠距離の分解能を上げたモード
NEAR（Near モード）	Far モードとは反対に、至近側での焦点合わせがやり易くなるように、至近側でのカーブ特性を緩やかにして、近距離での分解能を上げたモード

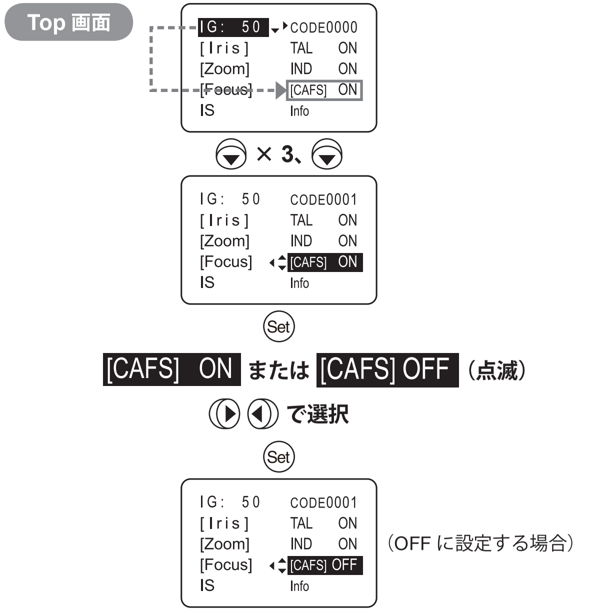
選択項目	(D) STD	FAR	NEAR

(D)：デフォルト値

CAFS

CAFS の設定

フォーカシングによる画角変化をゼロレベルに抑えます。


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 3、
IG: 50
CODE0001
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
Set
IG: 50
CODE0001
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] OFF
IS
Info

[CAFS] ON または [CAFS] OFF（点滅）

で選択

（OFF に設定する場合）

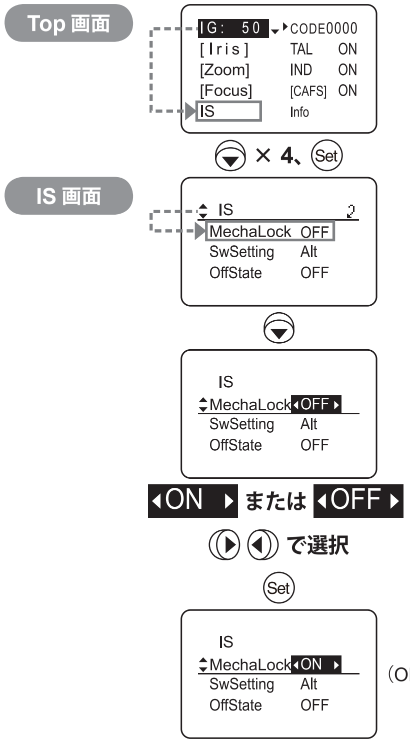
選択項目	(D) ON	OFF
機能	有効	無効

(D)：デフォルト値

IS – MechaLock

IS メカロック設定

撮影中の IS を強制的にロックします。


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4、Set
IS 画面
IS
MechaLock OFF
SwSetting Alt
OffState OFF
IS
MechaLock OFF
SwSetting Alt
OffState OFF
ON または OFF
で選択
Set
IS
MechaLock ON
SwSetting Alt
OffState OFF

（ON に設定する場合）

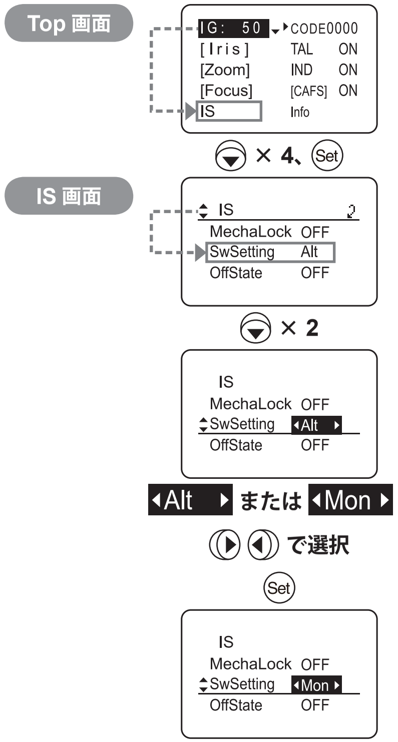
選択項目	(D) OFF	ON
機能	IS メカロック無効	IS メカロック有効

(D)：デフォルト値

IS – SWSetting

IS 操作スイッチ設定

IS 操作スイッチの状態（Alt ／ Mon）を選択します。


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4、Set
IS 画面
IS
MechaLock OFF
SwSetting Alt
OffState OFF
× 2
IS
MechaLock OFF
SwSetting Alt
OffState OFF
Alt または Mon
で選択
Set
IS
MechaLock OFF
SwSetting Mon
OffState OFF

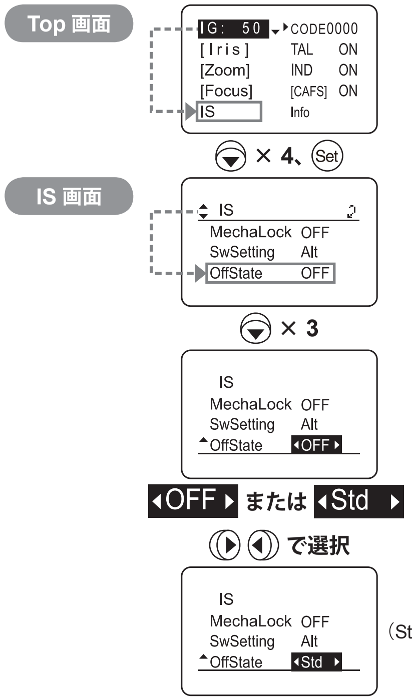
選択項目	(D) Alt	Mon
機能	オルタネイト動作	モーメンタリー動作

(D)：デフォルト値

IS – OffState

IS モード設定

IS スイッチを OFF にしたときの IS 操作（Off ／ IS 標準特性）を選択します。
（本編 p.17 参照）


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4、Set
IS 画面
IS
MechaLock OFF
SwSetting Alt
OffState OFF
× 3
IS
MechaLock OFF
SwSetting Alt
OffState OFF
OFF または Std
で選択
IS
MechaLock OFF
SwSetting Alt
OffState Std

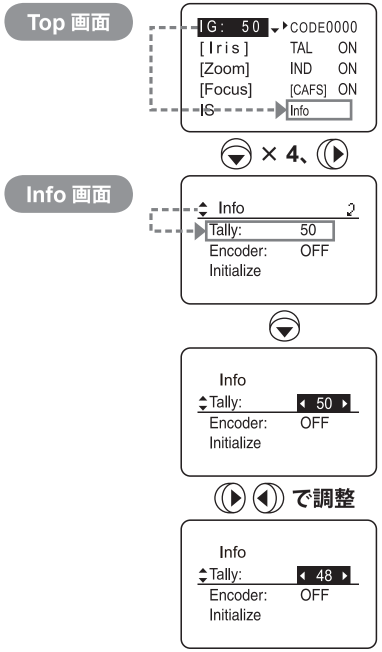
（Std に設定する場合）

選択項目	(D) OFF	Std
機能	IS 操作無効	IS 操作標準特性

(D)：デフォルト値

Info – Tally

タリー光量の設定


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4、
Info 画面
Info
Tally: 50
Encoder: OFF
Initialize
Info
Tally: 50
Encoder: OFF
Initialize
で調整
Info
Tally: 48
Encoder: OFF
Initialize

（48 にする場合）

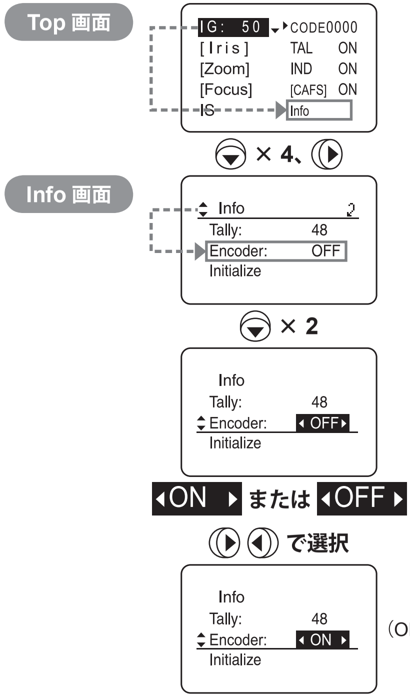
選択項目	01	～	99
機能	光量最小		光量最大

デフォルト値：工場出荷時にデフォルトして設定されます。

Info – Encoder

エンコーダー出力設定

Zoom および Focus エンコーダー出力機能の有効／無効を設定します。有効の場合はバーチャルコネクターより出力されます。詳しくは販売代理店またはキヤノン（株）にお問い合わせください。


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4、
Info 画面
Info
Tally: 48
Encoder: OFF
Initialize
× 2
Info
Tally: 48
Encoder: OFF
Initialize
ON または OFF
で選択
Info
Tally: 48
Encoder: ON
Initialize

（ON に設定する場合）

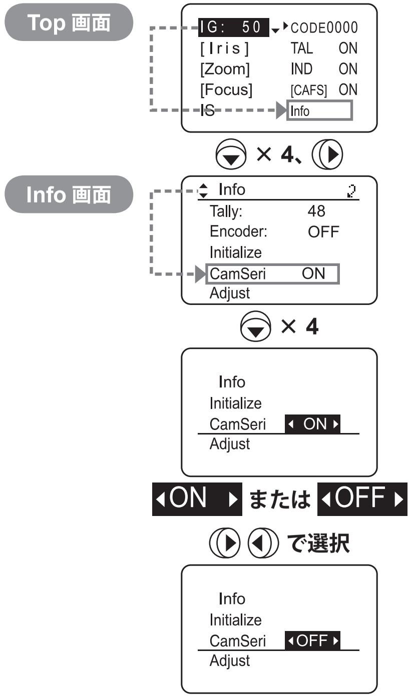
選択項目	(D)OFF	ON
機能	出力無効	出力有効

(D)：デフォルト値

Info – CamSeri

カメラシリアル通信の有効／無効

カメラとレンズ間のインターフェースの自動認識の有効／無効（アナログ制御）を切替えます。


Top 画面
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4、
Info 画面
Info
Tally: 48
Encoder: OFF
Initialize
CamSeri ON
Adjust
× 4
Info
Initialize
CamSeri ON
Adjust
ON または OFF
で選択
Info
Initialize
CamSeri OFF
Adjust

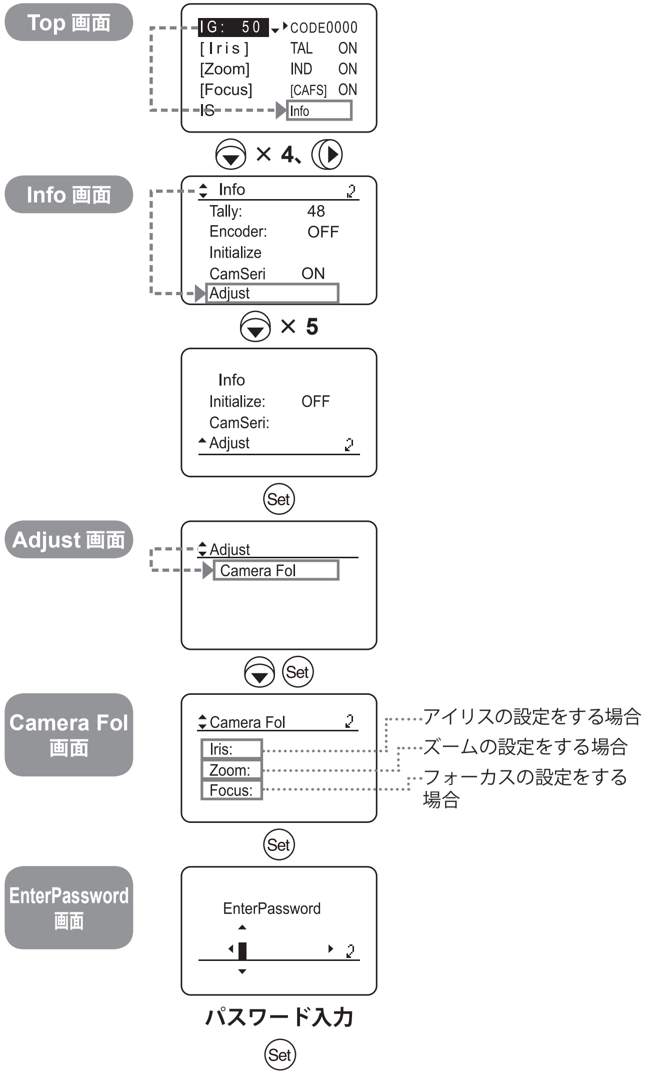
選択項目	(D)ON	OFF
機能	有効	無効

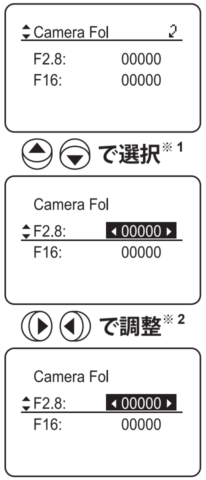
(D)：デフォルト値

Info – Adjust – Camera Fol

カメラフォロー電圧調整 Iris Zoom Focus

カメラ側（インジケーターなど）の都合によりレンズ側の変更が必要なとき、カメラに送り返す電圧を変更できます。
パスワードが必要ですので、販売代理店またはキヤノン（株）にお問い合わせください。


Top 画面
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 4、
Info 画面
Info
Tally: 48
Encoder: OFF
Initialize
CamSeri ON
Adjust
× 5
Info
Initialize: OFF
CamSeri:
Adjust
Set
Adjust 画面
Adjust
Camera Fol
Set
Camera Fol 画面
Camera Fol
Iris:
Zoom:
Focus:
アイリスの設定をする場合
ズームの設定をする場合
フォーカスの設定をする場合
Set
EnterPassword 画面
EnterPassword
パスワード入力
Set


Camera Fol
F2.8: 00000
F16: 00000
で選択※1
Camera Fol
F2.8: 00000
F16: 00000
で調整※2
Camera Fol
F2.8: 00000
F16: 00000

DISPLAY キーを押すと、データが保存されます

※（注 1）：選択された項目のデータが表示されます。
初めてこの操作をした場合は工場出荷時の値が表示されます。個々のレンズに調整された値ですので、元に戻すことも考慮し、メモをしておいてください。

※（注 2）：数値は、相対値表示です。
-32760 から 32760 まで選択できますが、元の値より大幅な変更は、他の機器に影響を及ぼす可能性がありますので、ご注意ください。

※（注）
- リセット操作を行っても、工場出荷時の設定に戻りません。
- パスワードは電源 OFF 時に無効になります。
- パスワード文字入力は上下ボタンで文字を探し、桁の移動および修正をするときは左右ボタンで行ってください。

選択項目	選択範囲	
Iris	F2.8 F16	-32760 ～ (0) ～ 32760
Zoom	Wide Tele	
Focus	Near Far	

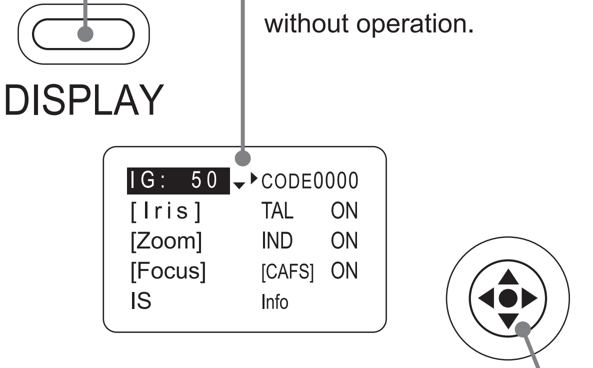
参考：(　) 内の数値は、工場出荷時の参考値です。

DISPLAY switch

Turn the display ON/OFF.

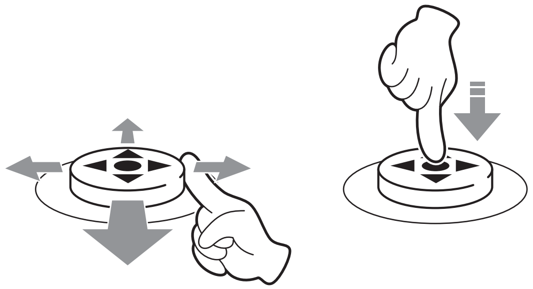
Display

It turns off if left for 2 minutes without operation.


DISPLAY
IG: 50
[Iris]
[Zoom]
[Focus]
IS
CODE0000
TAL ON
IND ON
[CAFS] ON
Info

Cursor button

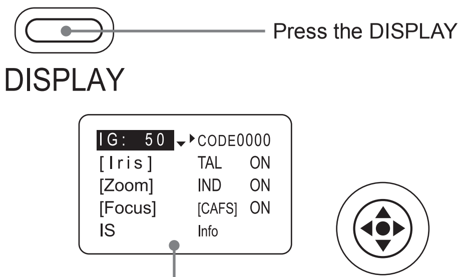
Press the cursor button up/down/left/right (⊜ ⊝ ◐ ◑) to move the cursor. Press the center (Set) to confirm.



Basic operation

1 Turn the lens power on.

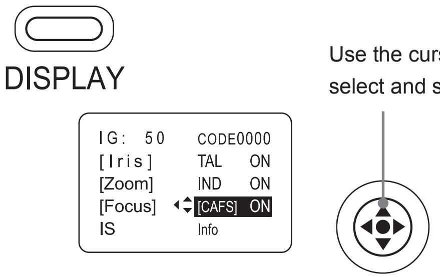
2


DISPLAY
IG: 50
[Iris]
[Zoom]
[Focus]
IS
CODE0000
TAL ON
IND ON
[CAFS] ON
Info

Press the DISPLAY switch.

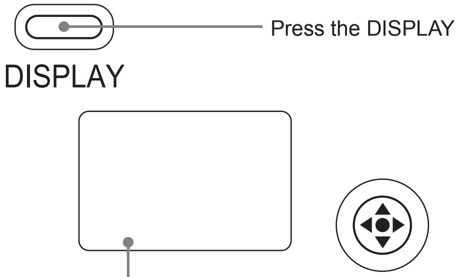
The display turns on.

3


DISPLAY
IG: 50
[Iris]
[Zoom]
[Focus]
IS
CODE0000
TAL ON
IND ON
[CAFS] ON
Info

Use the cursor button to select and set functions.

4

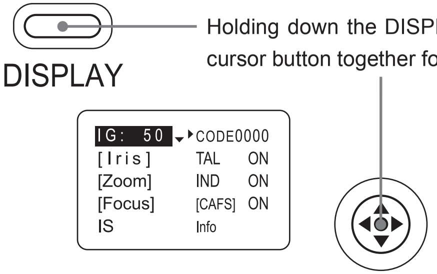


Press the DISPLAY switch.

The display turns off, and changes made to the settings are stored.

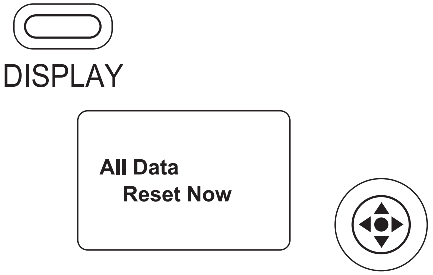
Reset operation

1


DISPLAY
IG: 50
[Iris]
[Zoom]
[Focus]
IS
CODE0000
TAL ON
IND ON
[CAFS] ON
Info

Holding down the DISPLAY switch and cursor button together for two seconds.

2

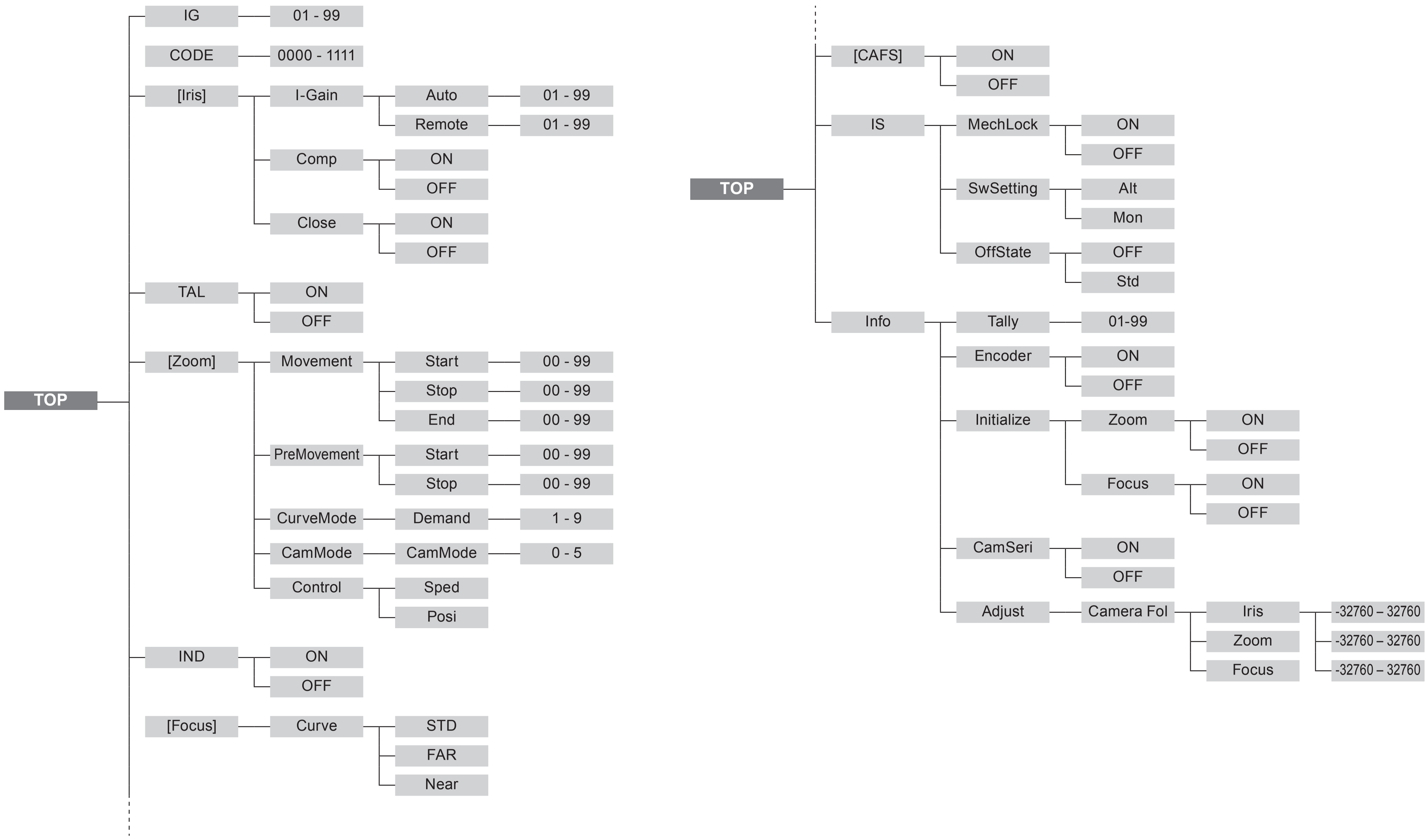

DISPLAY
All Data
Reset Now

The data in the table below are reset and return to the default values.

Setting item	Default value
CAFS setting	ON
Tally lamp lighted settings	ON
Indicator lighted settings	ON
Setting the iris correction to ON/OFF	ON
Setting the iris close detection to ON/OFF	Factory setting value
Setting the zoom servo start characteristics	50
Setting the zoom servo stop characteristics	50
Setting the zoom mechanism end stop characteristics	91
Setting the zoom start characteristics for preset operations	99
Setting the zoom stop characteristics for preset operations	91
Setting the analog demand curve characteristics	5*
Setting the servo mode type from the zoom demand	Sped
CAM mode settings	0
Focus demand curve characteristics	STD
Tally lamp light quantity setting	Factory setting value

* “3” only for the XJ60x.

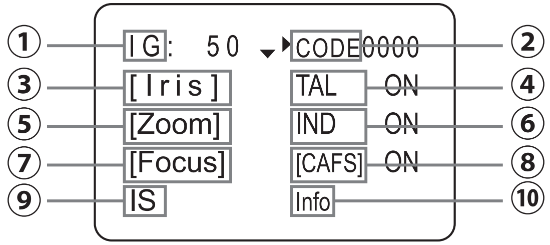
Display menu hierarchy


TOP
IG
01 - 99
CODE
0000 - 1111
[Iris]
I-Gain
Auto
01 - 99
Remote
01 - 99
Comp
ON
OFF
Close
ON
OFF
TAL
ON
OFF
[Zoom]
Movement
Start
00 - 99
Stop
00 - 99
End
00 - 99
PreMovement
Start
00 - 99
Stop
00 - 99
CurveMode
Demand
1 - 9
CamMode
CamMode
0 - 5
Control
Sped
Posi
IND
ON
OFF
[Focus]
Curve
STD
FAR
Near
TOP
[CAFS]
ON
OFF
IS
MechLock
ON
OFF
SwSetting
Alt
Mon
OffState
OFF
Std
Info
Tally
01-99
Encoder
ON
OFF
Initialize
Zoom
ON
OFF
Focus
ON
OFF
CamSeri
ON
OFF
Adjust
Camera Fol
Iris
-32760 – 32760
Zoom
-32760 – 32760
Focus
-32760 – 32760

TOP screen and various screens

The TOP screen is an initial screen displayed when the DISPLAY switch is pressed. Digital functions can be set and viewed from this screen.

TOP screen



IG: 50
CODE 0000
TAL ON
IND ON
[CAFS] ON

① IG

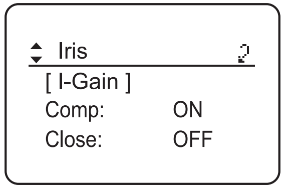
Adjusting the auto iris gain

② CODE

Lens code setting

③ [Iris]

Settings related to iris control



Comp: ON
Close: OFF

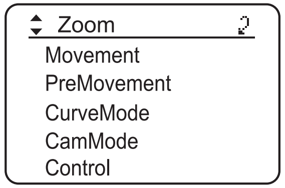
[I-Gain]:	Setting the iris gain (Auto/Remote)
Comp:	Setting the iris correction to ON/OFF
Close:	Setting the iris close detection to ON/OFF

④ TAL

Setting the tally lamp ON/OFF

⑤ [Zoom]

Settings related to zoom control



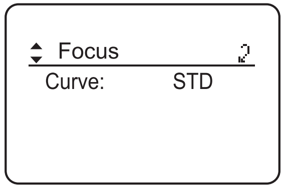
Movement:	Servo start/stop characteristics, mechanism end stop characteristics
PreMovement:	Setting the zoom start characteristics for preset operations
CurveMode:	Setting the analog demand curve characteristics
CamMode:	CAM mode settings
Control:	Setting the servo mode type from the zoom demand

⑥ IND

Setting the indicator ON/OFF

⑦ [Focus]

Settings related to focus control



Curve: STD

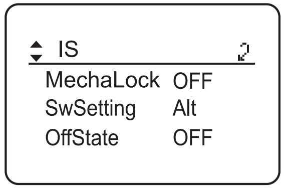
Curve: Focus demand curve characteristics

⑧ [CAFS]

Setting the CAFS ON/OFF

⑨ IS

Settings related to IS function

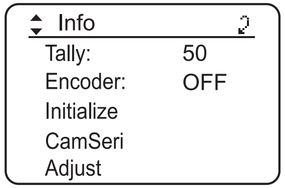


MechaLock OFF
SwSetting Alt
OffState OFF

MechaLock:	IS mechanical lock setting
SwSetting:	IS operation switch setting
OffState:	IS mode setting

⑩ Info

Other settings

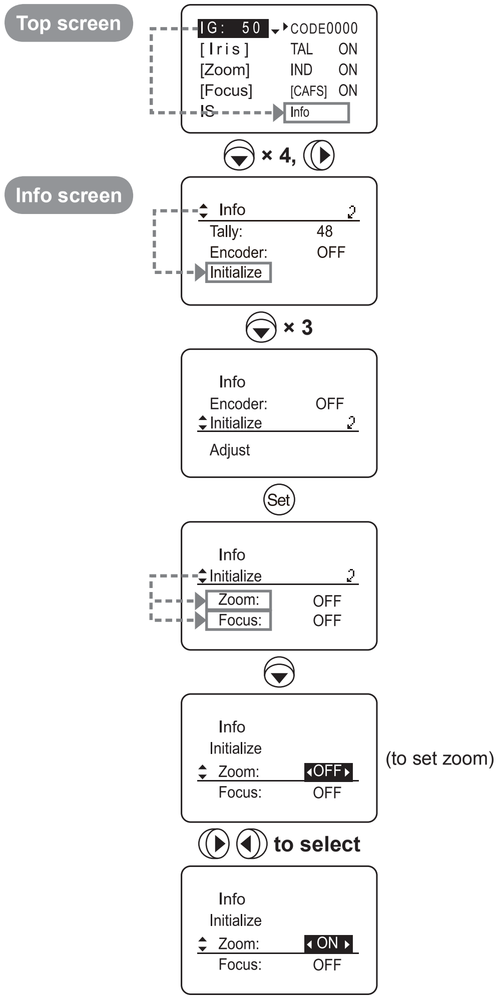


Tally: 50
Encoder: OFF

Tally:	Tally lamp light quantity setting
Encoder:	Encoder output setting
Initialize:	Initialize operation setting
CamSeri:	Setting the camera serial communication to ON/OFF
Adjust:	Adjusting the Camera Fol Voltage

Operation example (initialize operation setting)

Set whether or not to execute the zoom and focus initialization upon power on.


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 4,
Info screen
Info
Tally: 48
Encoder: OFF
Initialize
× 3
Info
Encoder: OFF
Initialize
Adjust
Set
Info
Initialize
Zoom: OFF
Focus: OFF
Info
Initialize
Zoom: OFF
Focus: OFF
(to set zoom)
to select
Info
Initialize
Zoom: ON
Focus: OFF

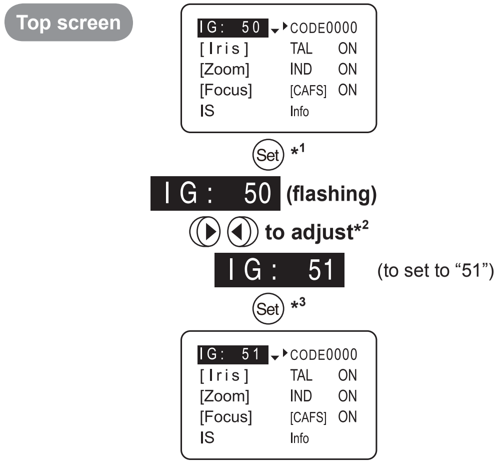
Turn the power off then on.

Selection item	(D) OFF	ON
Function	Initialization operation not performed	Initialization operation performed

(D): Default value

IG

Setting the auto iris gain


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set *1
IG: 50 (flashing)
to adjust*2
IG: 51
(to set to "51")
Set *3
IG: 51
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

*(Note 1): When adjusting the gain while checking the iris operation, set the camera's iris mode to [AUTO].

*(Note 2): Set in such a way that the maximum gain is obtained within the range where hunting will not occur.

*(Note 3): The iris gain setting is not reset even when the steps described in "Reset operation" on page E1 are taken.

For information on setting the auto iris gain using a trimmer, refer to "2-4 Iris Gain Adjustment" on page E8 in the Operation Manual.

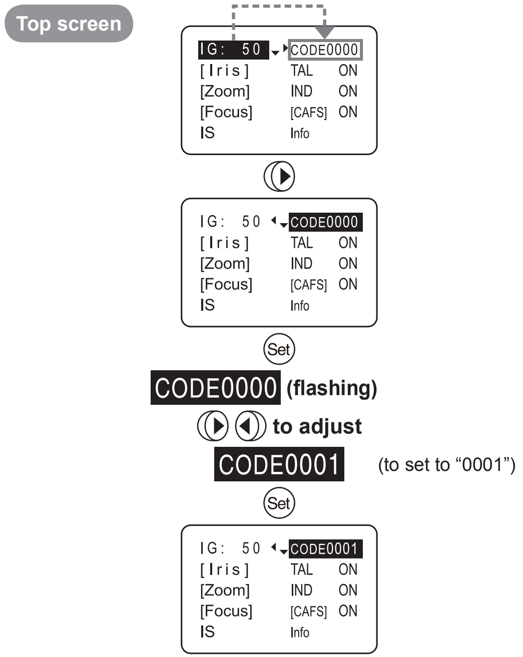
Selection item	01	–	99
Function	Minimum gain		Maximum gain

Default value: 50

CODE

Lens code setting

Give a number (code) to the lens, and the given number (code) can be sent to the camera side. Any of 16 different codes from 0000 to 1111 in binary format can be selected.
Although it depends on the camera's functions, these codes are sometimes used to differentiate between the lenses at the camera side.
Set these codes when instructed to do so by the camera manufacturer.


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
CODE0000 (flashing)
to adjust
CODE0001
(to set to "0001")
Set
IG: 50
CODE0001
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

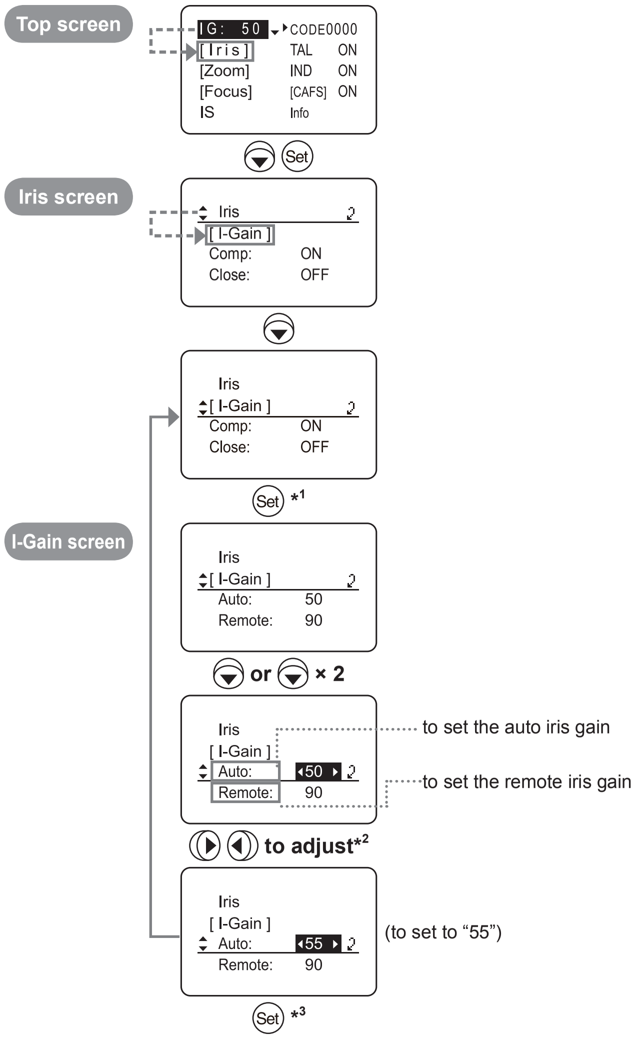
*(Note)
- The code has a binary format, and it comes in 16 variations.
- The lens code remains unchanged even after the resetting operation has been performed.

Selection item	0000	–	1111

Default value: This is set at the factory prior to shipment.

[Iris] – [I-Gain]

Setting the auto iris gain Auto
Setting the remote iris gain Remote


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
Iris screen
Iris
[I-Gain]
Comp: ON
Close: OFF
I-Gain screen
Set *1
Auto: 50
Remote: 90
or × 2
to set the auto iris gain
to set the remote iris gain
to adjust*2
Auto: 55
(to set to "55")
Set *3

*(Note 1): When adjusting the gain while checking the iris operation, set the camera's iris mode to [AUTO] (to set the auto iris gain) or [REMOTE] (to set the remote iris gain).

*(Note 2): Set in such a way that the maximum gain is obtained within the range where hunting will not occur.

*(Note 3): The iris gain setting is not reset even when the steps described in "Reset operation" on page E1 are taken.

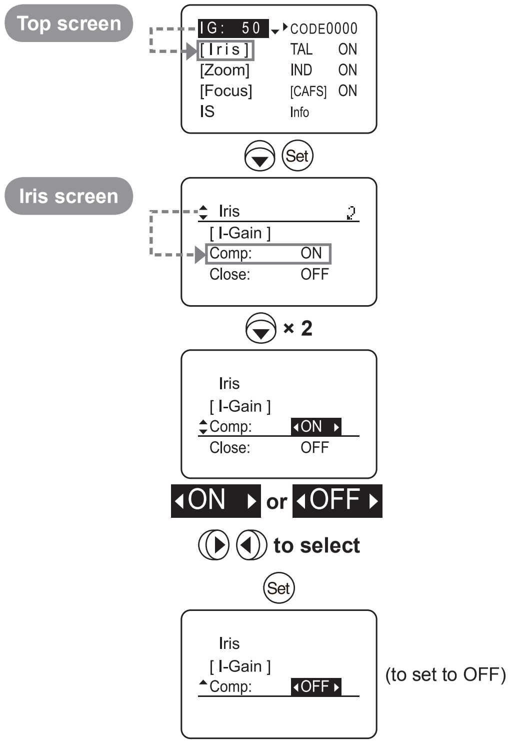
Selection item	01	–	99
Function	Minimum gain		Maximum gain

Auto iris gain default value: 50
Remote iris gain default value: 90

[Iris] – Comp

Setting the iris correction to ON/OFF

Set the function that corrects the iris by opening it by an amount equivalent to 2F when using an extender to ON or OFF.


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
Iris screen
Iris
[I-Gain]
Comp: ON
Close: OFF
× 2
ON or OFF
to select
Set
Comp: OFF
(to set to OFF)

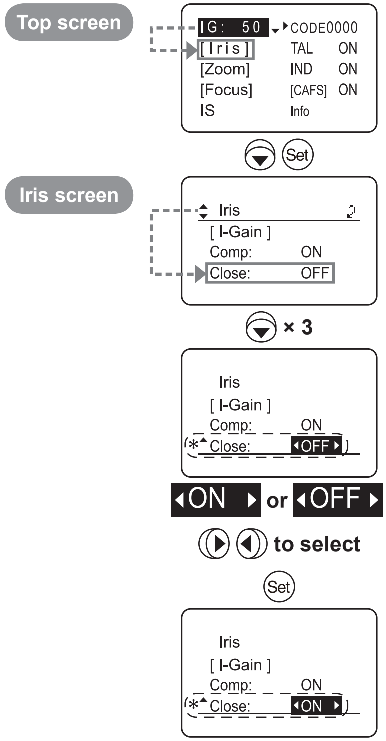
Selection item	(D) ON	OFF
Function	Iris correction	No iris correction

(D): Default value

[Iris] – Close

Setting the iris close detection to ON/OFF

This iris cannot be closed when the extender (2.0x) is inserted while the iris correction function is set to ON. To compensate for this, a function which closes the iris when iris close has been detected can be set.


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
Iris screen
Iris
[I-Gain]
Comp: ON
Close: OFF
× 3
Iris
[I-Gain]
Comp: ON
(* Close: OFF)
ON
or
OFF
to select
Set
Iris
[I-Gain]
Comp: ON
(* Close: ON)

(to set to ON)

* This appears and iris close detection takes effect when ON is selected as the Comp setting (iris correction).

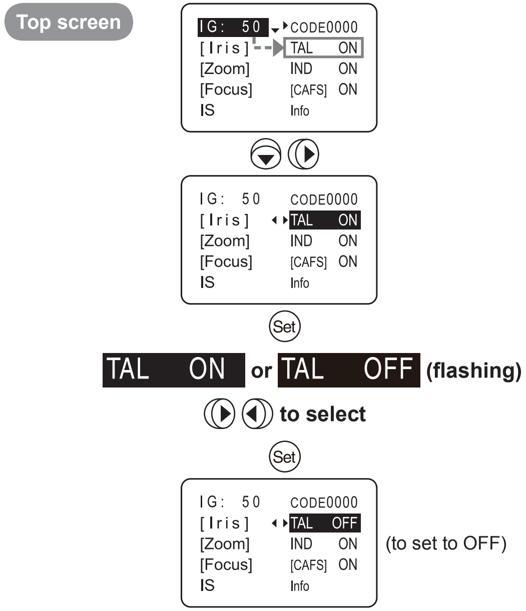
*(Note): Depending on the camera, it may not be possible for the iris to operate properly due to the interaction between the iris correction function of the lens and the iris control exercised from the camera. At such a time, set the iris close detection to OFF.

Selection item	ON	OFF
Function	Iris close detection	No iris close detection

Default value: This is set according to the camera interface at the factory prior to shipment.

TAL

Setting the tally lamp ON/OFF


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
TAL ON
or
TAL OFF
(flashing)
to select
Set
IG: 50
CODE0000
[Iris]
TAL OFF
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

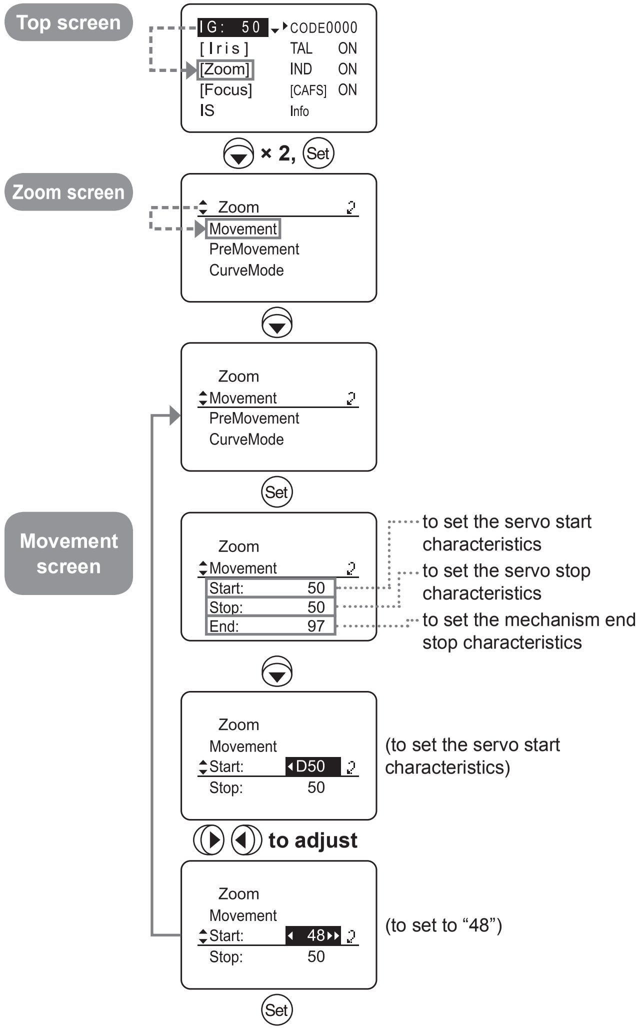
(to set to OFF)

Selection item	(D) ON	OFF
Function	Lighted	Extinguished

(D): Default value

[Zoom] – Movement

Setting the zoom servo start characteristics Start
Setting the zoom servo stop characteristics Stop
Setting the zoom mechanism end stop characteristics End


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 2,
Set
Zoom screen
Zoom
Movement
PreMovement
CurveMode
Zoom
Movement
PreMovement
CurveMode
Set
Movement screen
Zoom
Movement
Start: 50
Stop: 50
End: 97
Zoom
Movement
Start: D50
Stop: 50
to adjust
Zoom
Movement
Start: 48
Stop: 50
Set

to set the servo start characteristics

to set the servo stop characteristics

to set the mechanism end stop characteristics

(to set the servo start characteristics)

(to set to “48”)

Selection item	00	–	99
Function	Slow start		Quick start

Servo start characteristics default value: 50

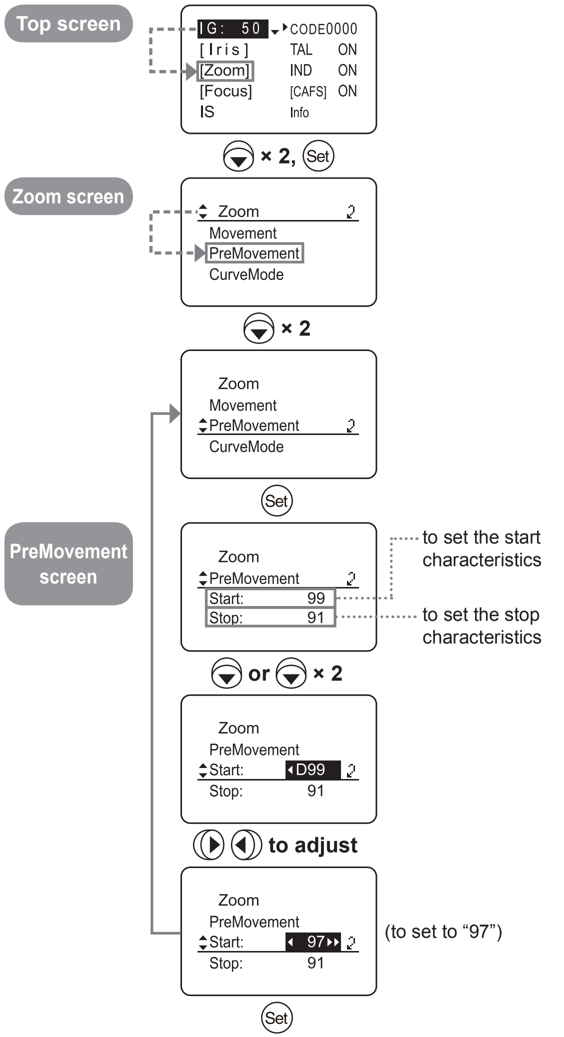
Servo stop characteristics default value: 50

Mechanism end stop characteristics default value: 91

[Zoom] – PreMovement

Setting the zoom start characteristics for preset operations **Start**

Setting the zoom stop characteristics for preset operations **Stop**


Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 2, Set
Zoom screen
Zoom
Movement
PreMovement
CurveMode
× 2
PreMovement screen
Zoom
Movement
PreMovement
CurveMode
Set
Zoom
PreMovement
Start: 99
Stop: 91
or × 2
Zoom
PreMovement
Start: D99
Stop: 91
to adjust
Zoom
PreMovement
Start: 97
Stop: 91
Set

to set the start characteristics

to set the stop characteristics

(to set to “97”)

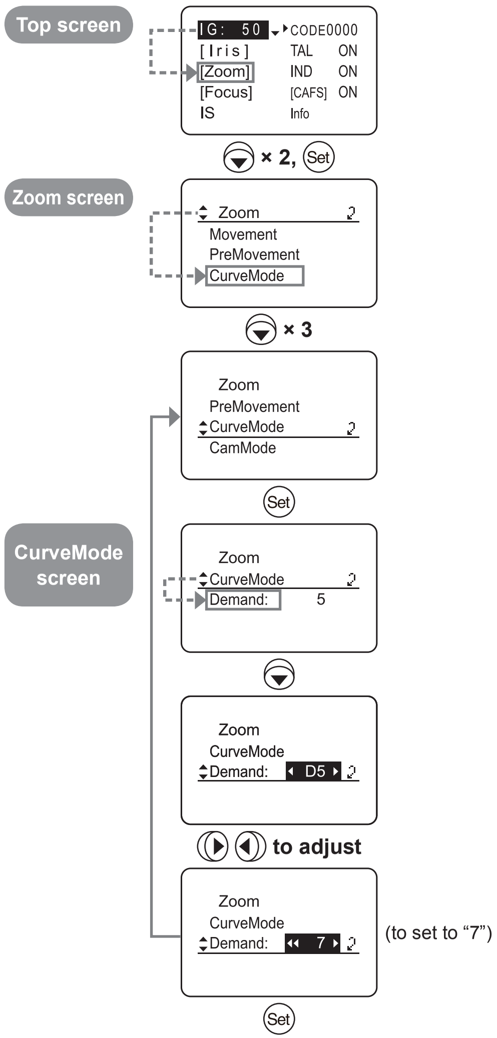
Selection item	00	–	99
Function	Slow start		Quick start

Start characteristics default value: 99
Stop characteristics default value: 91

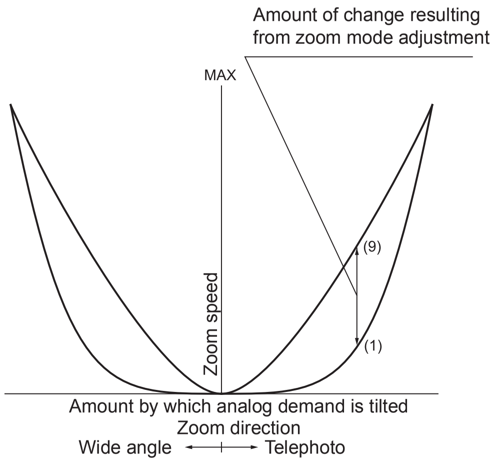
[Zoom] – CurveMode

Setting the analog demand curve characteristics

The characteristics of the zoom speed can be varied in response to the amount by which the analog zoom demand is tilted.


Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 2, Set
Zoom screen
Zoom
Movement
PreMovement
CurveMode
× 3
CurveMode screen
Zoom
PreMovement
CurveMode
CamMode
Set
Zoom
CurveMode
Demand: 5
Zoom
CurveMode
Demand: D5
to adjust
Zoom
CurveMode
Demand: 7
Set

(to set to “7”)



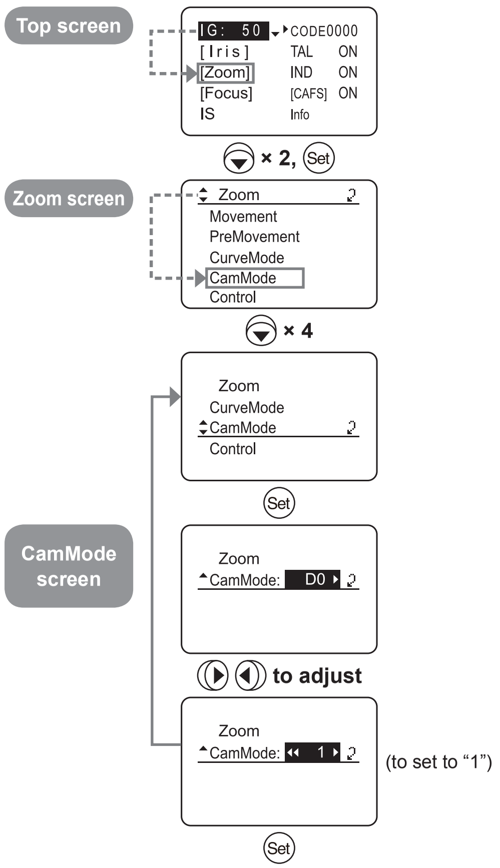
Selection item	1	2	3	4	(D) 5	6	7	8	9

(D): Default value

[Zoom] – CamMode – Demand

CAM mode settings

The changes in the zoom view angle in relation to the zoom control can be corrected.
No correction is made at the “0” setting, and the maximum correction is achieved at the “5” setting.


Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 2, Set
Zoom screen
Zoom
Movement
PreMovement
CurveMode
CamMode
Control
× 4
CamMode screen
Zoom
CurveMode
CamMode
Control
Set
Zoom
CamMode: D0
to adjust
Zoom
CamMode: 1
Set

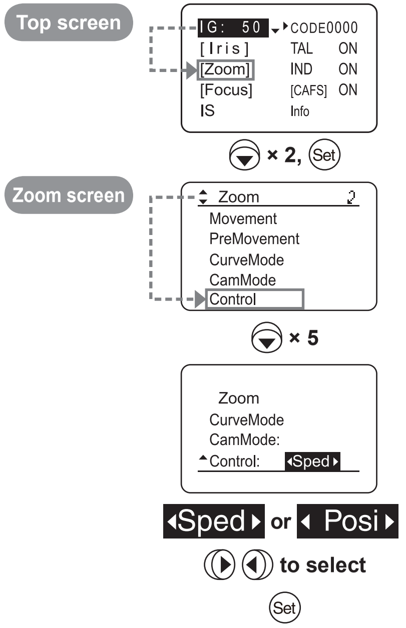
(to set to “1”)

Selection item	(D) 0	–	5
Function	No correction		Maximum correction

(D): Default value

[Zoom] – Control

Setting the servo mode type from the zoom demand (Some models only indicate the currently set servo mode, depending on the specifications.)

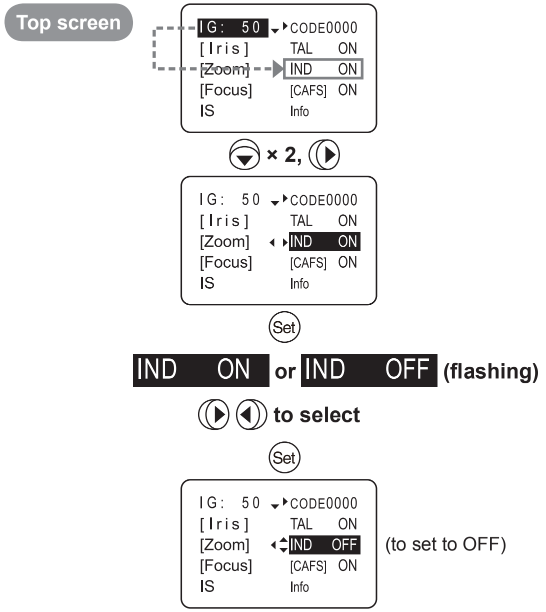

Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 2, Set
Zoom screen
Zoom
Movement
PreMovement
CurveMode
CamMode
Control
× 5
Zoom
CurveMode
CamMode:
Control: Sped
Sped or Posi
to select
Set

Selection item	(D) Sped	Posi
Function	Speed servo	Position servo

(D): Default value

IND

Setting the indicator ON/OFF


Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 2,
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
Set
IND ON or IND OFF (flashing)
to select
Set
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND OFF
[Focus] [CAFS] ON
IS Info

(to set to OFF)

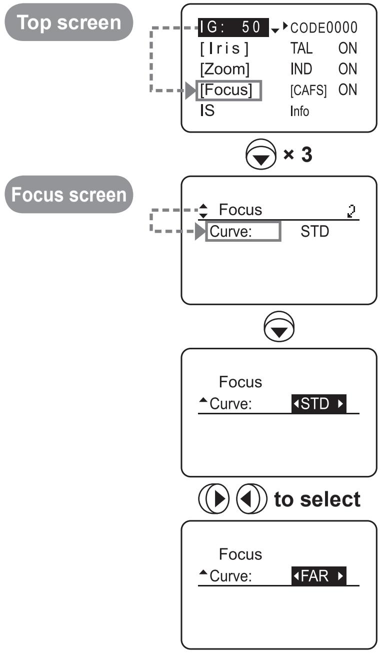
Selection item	(D) ON	OFF
Function	Lighted	Extinguished

(D): Default value

[Focus] – Curve

Focus demand curve characteristics

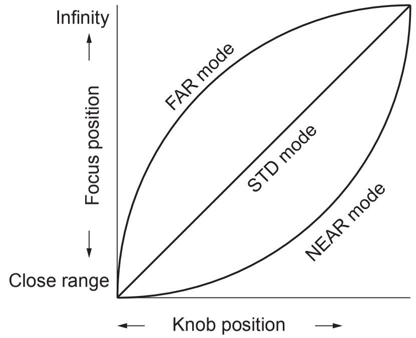
The focus demand curve characteristics can be set when focus control is performed from the camera. (However, this is not possible when using serial data control.)


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Focus screen
Focus
Curve:
STD
Focus
Curve:
STD
Focus
Curve:
FAR

× 3

to select

(to set to FAR mode)



STD (Standard mode)	The Standard mode has the characteristics where the relationship between the rotation amount of the control knob and the moving amount of the focus lens group is almost in linear.
FAR (Far mode)	The Far mode facilitates focusing on an object in the far end, by making the far end curve characteristics gentle to increase the far end resolution.
NEAR (Near mode)	Contrary to the Far mode, the Near mode facilitates focusing on an object in the near end, by making the near end curve characteristics gentle to increase the near end resolution.

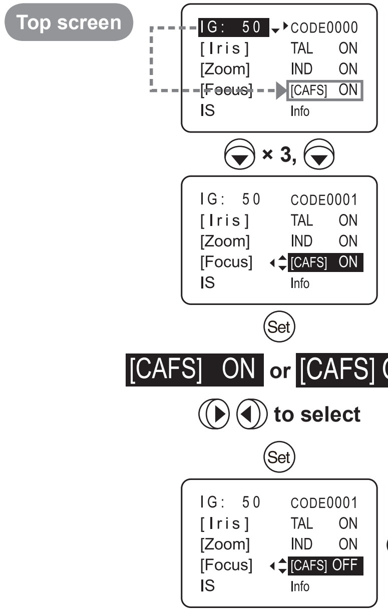
Selection item	(D) STD	FAR	NEAR

(D): Default value

CAFS

CAFS setting

The changes in the view angle caused by focusing can reduce to the zero level.


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
IG: 50
CODE0001
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
Set
Set
IG: 50
CODE0001
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] OFF
IS
Info

× 3,

[CAFS] ON or **[CAFS] OFF** (flashing)

to select

(to set to OFF)

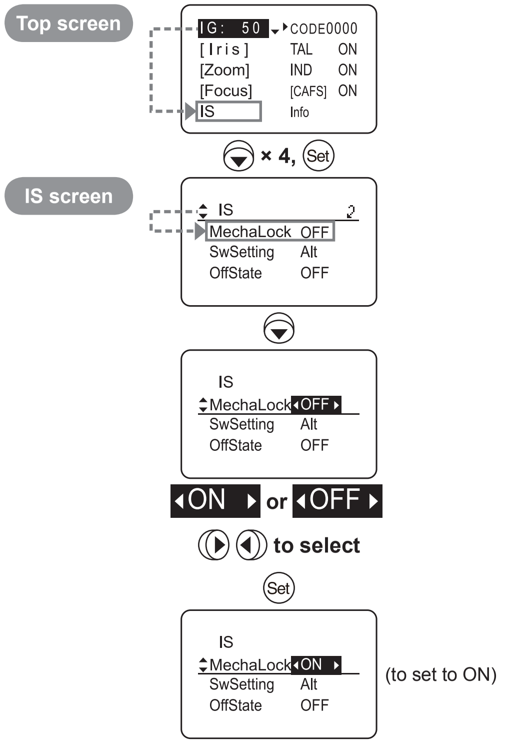
Selection item	(D) ON	OFF
Function	Enabled	Disabled

(D): Default value

IS – MechaLock

IS mechanical lock setting

The IS mechanism can be forcibly locked (mechanical lock) even while the lens is shooting.


Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4, Set
IS screen
IS
MechaLock OFF
SwSetting Alt
OffState OFF
IS
MechaLock OFF
SwSetting Alt
OffState OFF
ON or OFF
to select
Set
IS
MechaLock ON
SwSetting Alt
OffState OFF

(to set to ON)

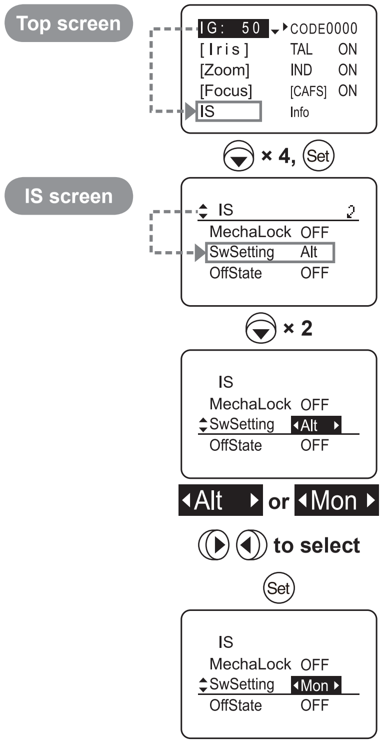
Selection item	(D) OFF	ON
Function	IS mechanical lock off	IS mechanical lock on

(D): Default value

IS – SWSetting

IS operation switch setting

The type of IS operation switch (Alt/Mon) that is used can be selected.


Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4, Set
IS screen
IS
MechaLock OFF
SwSetting Alt
OffState OFF
× 2
IS
MechaLock OFF
SwSetting Alt
OffState OFF
Alt or Mon
to select
Set
IS
MechaLock OFF
SwSetting Mon
OffState OFF

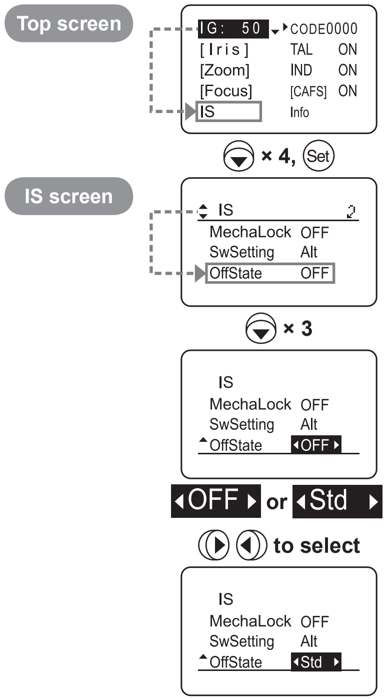
Selection item	(D) Alt	Mon
Function	Alternate type	Momentary type

(D): Default value

IS – OffState

IS mode setting

The IS operation (Off/IS standard characteristics) when the IS switch is set to OFF can be selected.
(Refer to page E15 of the Operation Manual.)


Top screen
IG: 50 CODE0000
[Iris] TAL ON
[Zoom] IND ON
[Focus] [CAFS] ON
IS Info
× 4, Set
IS screen
IS
MechaLock OFF
SwSetting Alt
OffState OFF
× 3
IS
MechaLock OFF
SwSetting Alt
OffState OFF
OFF or Std
to select
IS
MechaLock OFF
SwSetting Alt
OffState Std

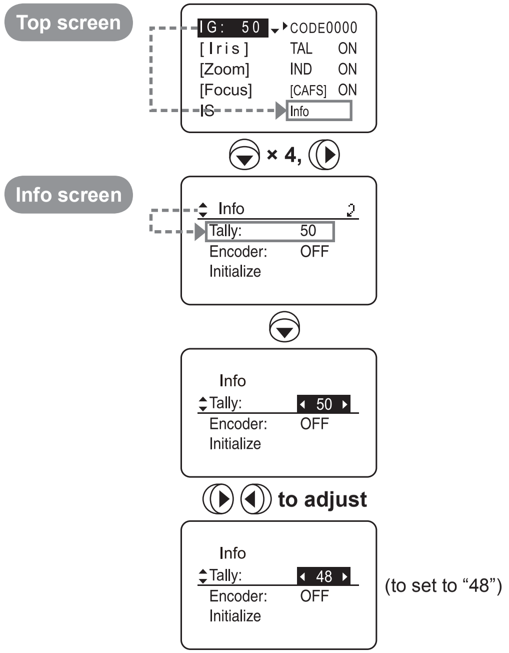
(to set to Std)

Selection item	(D) OFF	Std
Function	IS operation stop	IS operation standard characteristics

(D): Default value

Info – Tally

Tally lamp light quantity setting


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 4,
Info screen
Info
Tally: 50
Encoder: OFF
Initialize
Info
Tally: 50
Encoder: OFF
Initialize
to adjust
Info
Tally: 48
Encoder: OFF
Initialize
(to set to “48”)

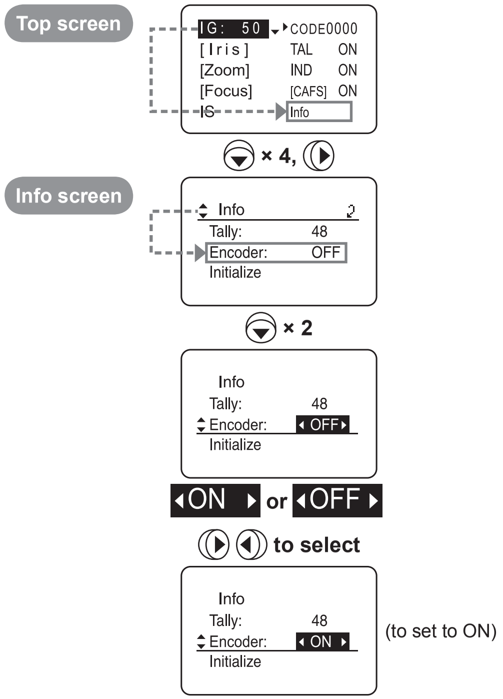
Selection item	01	–	99
Function	Minimum light quantity		Maximum light quantity

Default value: This is set as the default value at the factory prior to shipment.

Info – Encoder

Encoder output setting

The zoom and focus encoder output function can be enabled or disabled. When it is enabled, signals are output from the virtual connector. For details, contact with your dealer or Canon Inc.


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 4,
Info screen
Info
Tally: 48
Encoder: OFF
Initialize
× 2
Info
Tally: 48
Encoder: OFF
Initialize
ON or OFF
to select
Info
Tally: 48
Encoder: ON
Initialize
(to set to ON)

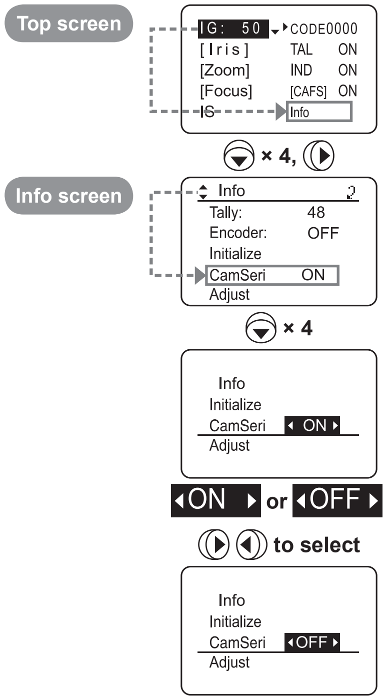
Selection item	(D) OFF	ON
Function	Output disabled	Output enabled

(D): Default value

Info – CamSeri

Setting the camera serial communication to ON/OFF

The automatic identification setting of the interface between the camera and the lens can be switched between ON (enabled) or OFF (analog control).

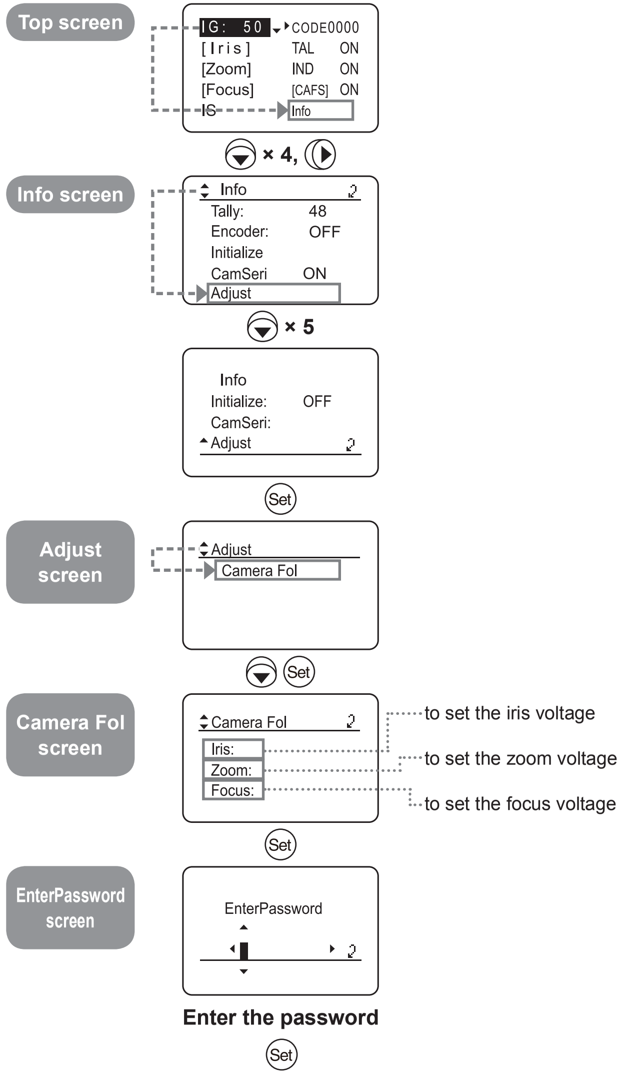

Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 4,
Info screen
Info
Tally: 48
Encoder: OFF
Initialize
CamSeri ON
Adjust
× 4
Info
Initialize
CamSeri ON
Adjust
ON or OFF
to select
Info
Initialize
CamSeri OFF
Adjust

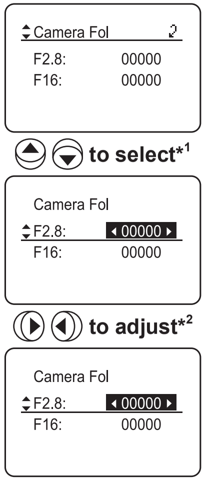
Selection item	(D) ON	OFF
Function	Enabled	Disabled

(D): Default value

Adjusting the Camera Fol Voltage **Iris** **Zoom** **Focus**

The voltages sent back from the lens to the camera can be changed when it is necessary to change the lens side according to the situation on the camera side (indicators, etc.). A password is required, so please contact the distributing agent or Canon Inc.


Top screen
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info
× 4,
Info screen
Info
Tally: 48
Encoder: OFF
Initialize
CamSeri ON
Adjust
× 5
Info
Initialize: OFF
CamSeri:
Adjust
Set
Adjust screen
Adjust
Camera Fol
Set
Camera Fol screen
Camera Fol
Iris:
Zoom:
Focus:
to set the iris voltage
to set the zoom voltage
to set the focus voltage
Set
EnterPassword screen
EnterPassword
Enter the password
Set


Camera Fol
F2.8: 00000
F16: 00000
to select*1
Camera Fol
F2.8: 00000
F16: 00000
to adjust*2
Camera Fol
F2.8: 00000
F16: 00000

Press the DISPLAY switch to store the data.

*(Note 1): The data of the selected item is displayed.
When this operation is performed for the first time, the factory default settings at the time of shipment will be displayed. These are the values that have been adjusted to each individual lens. Make a note of them in case they are to be restored.

*(Note 2): The numerical value is a relative value display.
Please note that making a radical change from the original value has the possibility to influence other equipment even though it possible to select from -32760 to 32760.

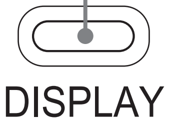
*(Note)
- The factory default settings at the time of shipment will not be restored even when the reset operation is performed.
- The password is invalid when the power is turned off.
- Perform password character input by locating the characters using the up and down buttons, and moving from one character to another or making corrections using the left and right buttons.

Selection item	Selection range	
Iris	F2.8 F16	-32760–(0)–32760
Zoom	Wide Tele	
Focus	Near Far	

Reference: The numerical values in parentheses are the reference values for the factory defaults at the time of shipment.

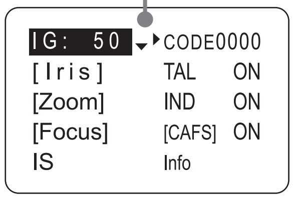
DISPLAY（显示屏）开关

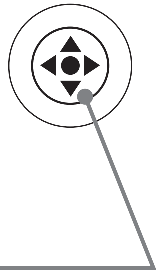
启动 / 关闭（ON/OFF）显示屏的显示。



显示屏

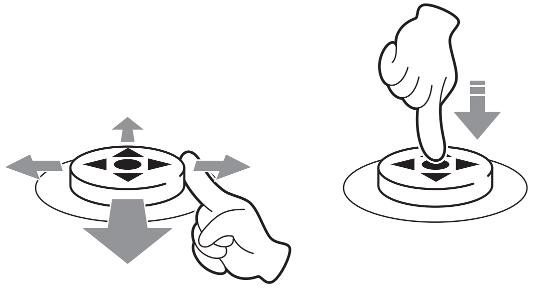
停止操作状态持续超过 2 分钟以上时，显示消失。


IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info



光标操纵钮

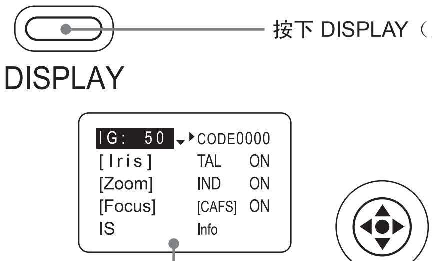
向上下左右（⊜ ⊝ ◐ ◑）倾斜该钮移动光标。按动中央部位（Set），则可确定位置。



基本操作

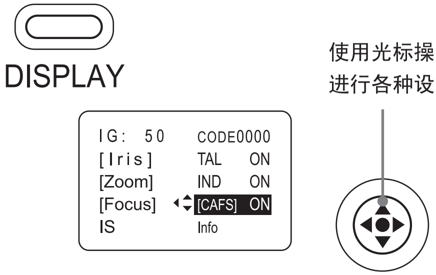
1 接通镜头电源。

2 按下 DISPLAY（显示屏）开关。

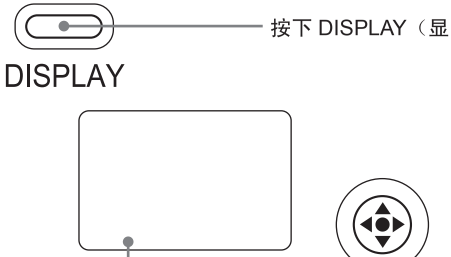

DISPLAY
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

显示屏闪亮。

3 使用光标操纵钮，进行各种设定。


DISPLAY
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

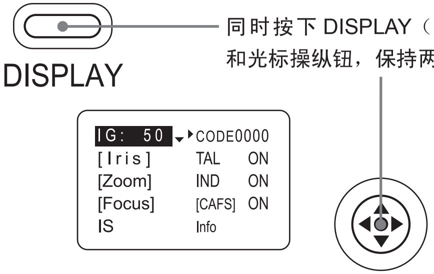
4 按下 DISPLAY（显示屏）开关。



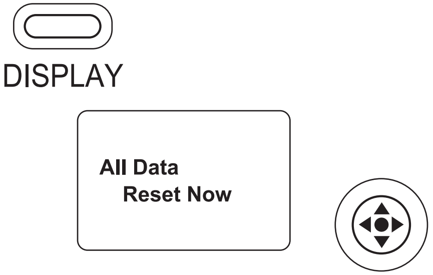
显示屏熄灯，更改内容被保存。

复位操作

1 同时按下 DISPLAY（显示屏）开关和光标操纵钮，保持两秒钟。


DISPLAY
IG: 50
CODE0000
[Iris]
TAL ON
[Zoom]
IND ON
[Focus]
[CAFS] ON
IS
Info

2


DISPLAY
All Data
Reset Now

下表的数据被复位，返回缺省值。

设定项目	缺省值
CAFS 设定	ON
播放指示灯设定	ON
指示灯设定	ON
光圈补偿的 ON/OFF 切换设定	ON
光圈关闭检测的 ON/OFF 设定	工厂设定值
变焦伺服启动特性的设定	50
变焦伺服停止特性的设定	50
变焦机构端部停止特性的设定	91
各项预设变焦启动特性的设定	99
各项预设变焦停止特性的设定	91
模拟电动控制器曲线特性的设定	5*
利用变焦电动控制器设定伺服模式类型	Sped
CAM 模式设定	0
聚焦电动控制器曲线特性	STD
播放指示灯光量设定	工厂设定值

* 只有 XJ60x 为“3”。

OPERATION MANUAL

索引

アイリス 16
アイリスゲイン 10
エクステンダー 17
ズーム 15
フォーカス 15
フランジバック 9

INDEX

BACK FOCUS E7
EXTENDER E15
FOCUS E13
IRIS E14
IRIS GAIN E8
ZOOM E13

索引

变焦 C13
光圈 C14
光圈增益 C8
后焦 C7
聚焦 C13
增距镜 C15

DISPLAY OPERATION MANUAL

索引

インジケーター 8
エンコーダー 11
カメラシリアル 11
初期化 4
タリー 6

INDEX

CAMERA SERIAL E11
ENCORDER E11
INDICATOR E8
INITIALIZE E4
TALLY E6

索引

编码器 C11
播放 C6
初始化 C4
摄像机串行 C11
指示器 C8

memo

memo

memo

日本

キヤノンマーケティングジャパン株式会社
イメージングソリューション技術部
108-8011　東京都港区港南2-16-6
Tel:(03)3740-3305
Fax:(03)3740-3307

中国

佳能（中国）有限公司
北京市东城区金宝街89号
金宝大厦15层
邮编 100005
电话:+86(0)10-8513-9999
传真:+86(0)10-8513-9915

Singapore

Canon Singapore Pte. Ltd.
REG ICP Sales & Marketing Div.
1 HarbourFront Avenue
#04-01 Keppel Bay Tower
Singapore 098632
Tel:+65-6799-8888

Asia

Canon Inc.
ICP5 Planning & Marketing Div.
30-2, Shimomaruko 3-chome, Ohta-ku,
Tokyo, 146-8501, Japan
Tel:+81(0)3-3757-7453
Fax:+81(0)3-3757-7086

North & South America

Canon U.S.A., Inc.
Broadcast and Communications Div.
(Headquarters)
65 Challenger Road, Ridgefield Park, NJ, 07660
Tel:+1(201)807-3300
Fax:+1(201)807-3333

Canada

Canon Canada, Inc.
Broadcast and Communications Div.
6390 Dixie Road, Mississauga, Ontario, L5T
1P7, Canada
Tel:+1(905)795-2012
Fax:+1(905)795-2087

Europe/Africa/Middle East

Canon Europe Ltd.
Broadcast Products Div.
3 The Square, Stockley Park, Uxbridge,
Middlesex, UB11 1ET, UK
Tel:+44(0)20-8588-8140
Fax:+44(0)20-8588-8929

Australia

Canon Australia Pty. Ltd.
Optical Products Division
1 Thomas Holt Drive, North Ryde, NSW
2113, Australia
Tel:+61(0)2-9805-2000
Fax:+61(0)2-9805-2444

キヤノン株式会社
〒 146-8501 東京都大田区下丸子 3-30-2
仕様・外観・商品構成などはお断りなく変更することがあります。

CANON INC.
30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo, 146-8501, Japan
Subject to change without notice.

进口商：佳能（中国）有限公司
地址：100005 北京市东城区金宝街 89 号　金宝大厦 15 层
规格・外观・商品构成等进行变更，恕不事先一一通知。

修订：2012. 12. 1　原产地：日本
Pub No. B-IM-10060C　1212S
©2012.12 CANON INC.
PRINTED IN JAPAN